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The Preparation of Anti-Rinderpest Serum using Animals of moderate susceptibility as Virus Producers

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The Preparation of Anti-Rinderpest Serum using Animals of moderate susceptibility as Virus Producers.

PART I. BUFFALOES.

(Received for publication on 8th July, 1921.)

Introduction.

ONE of the chief difficulties encountered in the preparation of anti-rinderpest serum in countries where the disease is enzootic is the provision of an adequate supply of highly susceptible animals for use as virus producers and for testing the potency of the different brews of serum prepared.

The employment of cattle of relatively low susceptibility as virus producers is of primary importance for those countries where rinderpest is wide-spread and where there are no highly susceptible cattle available, as in such circumstances it is necessary to import suitable animals and with them all the risks of bringing in other blood-borne diseases.

Further, due consideration must be given to the fact that cattle are regarded as sacred in India and that there is a strong religious prejudice against killing them. Buffaloes are, however, not looked upon in the same light.

The present work has been carried out with the object of ascertaining if a sufficiently potent serum can be prepared by the use of virus obtained from animals which are not highly susceptible to the disease.

Schemes have been brought forward from time to time in India for the establishment of a second laboratory for the preparation of anti-rinderpest serum in one or other of the southern provinces.

In 1906 an ideal site¹ was selected in the Palni Hills in the Madras Presidency but on further investigation it was found that the animals available were not sufficiently susceptible for use as virus producers, and the site was therefore abandoned. Other sites were examined in the United Provinces, the Punjab, the North-West Frontier Province and Bengal and although some of them were climatically suitable all

¹ Holmes, J. D. E., *I. C. V. D., Mem. no. 3, p. 98, 1913.*

were abandoned either on account of an insufficient supply of susceptible cattle, or because the susceptibility of the animals available was too low.

THE NECESSITY FOR A SECOND INSTITUTE FOR THE MANUFACTURE OF
ANTI-RINDERPEST SERUM IN INDIA.

At the present time the Muktesar Laboratory and its Branch Laboratory at Bareilly depend entirely on the Kumaun Hill cattle for the necessary supply of susceptible animals, and the purchase of these animals is becoming more and more difficult every year. In 1910 it was stated that the supply was overworked and there has been a continuous drain ever since.

Further, the question of the disease breaking out in the Kumaun Hills must be considered. A severe outbreak of rinderpest amongst these highly susceptible cattle might in certain circumstances spread with great rapidity with a resultant heavy loss before prophylactic measures could be carried out and the survivors owing to the acquisition of an active immunity would then be useless for the requirements of this laboratory.

With the existing facilities, the supply of anti-rinderpest serum has often been inadequate. There have been occasional temporary breakdowns in the supply on account of labour troubles and deficiency in the supply of hill bulls for use as virus producers. At the best the increased annual output has only sufficed to meet the increased demand as the Provincial Veterinary Departments have expanded. Then at times when there was an abnormal demand due to wide-spread rinderpest outbreaks, there was no reserve and the serum was unobtainable when it was most urgently required.

This inadequacy in the supply of serum has repeatedly been pointed out in the annual administration reports of the Provincial Veterinary Departments.

The largest demand for serum comes from South India, and the long railway journey taking from one to three weeks, the deterioration in the serum on account of exposure to high temperatures *en route* and the cost of the freight, all point to the choice of a site in South India as the best for a second laboratory, as was originally proposed as stated above in 1906. Hitherto it has not been possible further to consider the question as there was no supply of suitable animals for use as virus producers.

In 1909 outbreaks of rinderpest and foot and mouth disease¹ seriously interfered with the supply of hill cattle and the output of serum for that

¹ *Loc. cit.*, p. 2.

year fell short of the previous year by 36,000 doses. The number of doses of serum prepared in 1909 was a little over 5 lakhs and with the present annual output at 36 lakhs, any failure of the supply of hill cattle would be far more serious.

It must be recognized therefore that the supply of anti-rinderpest serum for the whole of India stands upon a rather frail foundation, and the establishment of a second laboratory is essential to safeguard the future serum supply against possible contingencies.

THE NECESSITY FOR FINDING A SUBSTITUTE FOR KUMAUN HILL BULLS FOR USE AS VIRUS PRODUCERS.

If a serum of a sufficiently high potency for practical use can be prepared by the use of virus from animals of a relatively low susceptibility, such as young male plains buffaloes, then the chief obstacle to the establishment of a second laboratory will have been surmounted.

The questions to be investigated are :—

- (a) If continual subpassaging of the rinderpest virus from buffalo to buffalo results in loss of virulence.
- (b) If the serum prepared from hyperimmunizing injections of this buffalo antigen is sufficiently potent.

In this laboratory at the present time large plains buffaloes of from 500 to 900 lb. weight are used for the preparation of serum. The antigen is obtained from hill bulls and small male plains buffaloes, the virus-producing buffaloes being however always inoculated directly from hill bulls.

In the present experiment small male plains buffaloes have been exclusively employed for the production of virus, and the disease has been inoculated from one to another in a continual series; the serum producers have been the ordinary big plains buffaloes such as are used in the routine work.

The serum prepared was made up in brews of ten thousand doses (5 cc.), and a total quantity of one hundred and ten thousand doses, or eleven brews were prepared. Each brew was tested in the usual way on hill cattle.

The object of testing a series of small brews was to ascertain if at any point, the brews would show a deterioration in potency on account of the subpassaging of the antigen direct from buffalo to buffalo. If such deterioration was found, it was considered likely that the introduction of a few hill bull virus producers would exalt the antigen so that it could again be continued directly from buffalo to buffalo and produce a potent serum.

Details of Experiments.

THE VIRUS PRODUCERS USED.

The buffaloes came from the Bareilly District and were young animals twelve to eighteen months old, averaging from 250—350 lb. weight.

The experiments tabulated below occupied a period of about three months. The total number of buffaloes used was 131, and this represented 34 subpassages or generations of the virus (Table II). Three to four virus producers were inoculated from each good reactor.

The mortality among these buffaloes to rinderpest can be put at approximately 40 per cent.

Holmes¹ states:—"The buffaloes from the Bareilly District are considerably more susceptible to rinderpest than the bulls (of the Bareilly District) and though the mortality is slight, the course of the disease is fairly severe."

This refers to adult buffaloes. Our experience is that young buffaloes from the same district are more susceptible. Many of those which recovered passed through a severe attack of the disease. About one-third of the animals which eventually recovered were bled for virus while at the height of the reaction.

The 43.3 per cent. of animals shown as recovered in the table below do not represent a loss as they were bled for serum at the rate of 6 cc. per lb. body weight on the 21st day after the date of inoculation.

Holmes² states:—"The serum of buffaloes after natural recovery is slightly less potent than serum following a hyperimmunization injection. After natural recovery the serum is protective at 2 cc. after hyperimmunization at about 1 cc. per 600 lb. weight."

After one bleeding for serum these discontinued buffaloes can be disposed of and on account of the immunity to the disease which they have acquired, they are of an enhanced value.

Virus producers	Percentage Discontinued	Percentage Died from rinderpest	Percentage Bled out	Percentage Destroyed	Percentage Used for virus
131	43.3	36.6	17.5	2.2	42.7

¹ *Loc. cit.*, p. 159.

² Holmes, J. D. E., *Mem. Dept. Agri. India, Vet. Ser. I, No. 2, p. 53.*

THE POTENCY OF THE BREWS PREPARED.

The various brews of serum were prepared according to the ordinary routine method employed in this laboratory. Owing to the scarcity of hill cattle only eight of the eleven brews were tested. However,

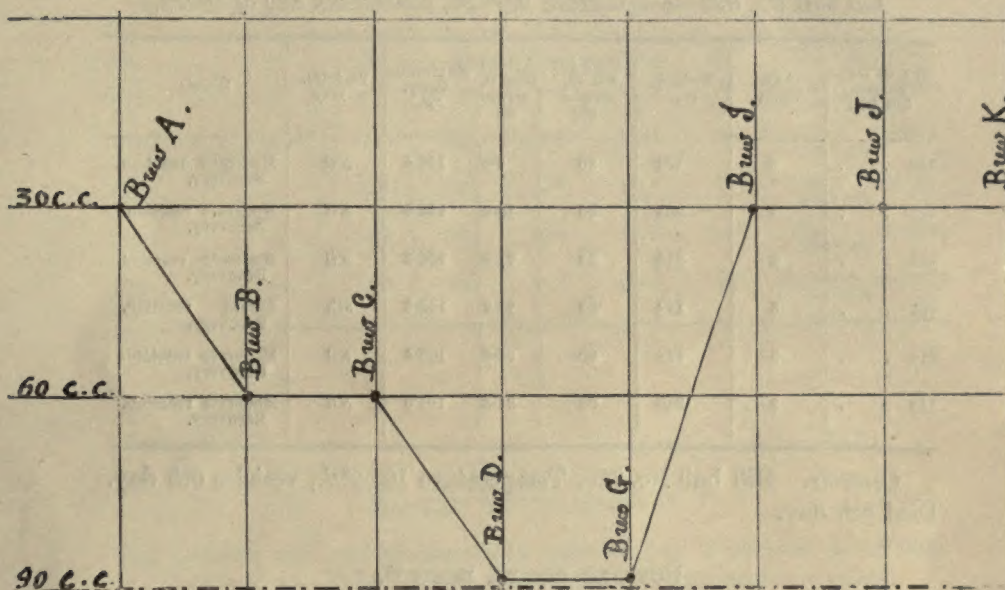


Fig. 1. Showing potency of different brews prepared.

All serum issued is standardised to protect hill Cattle in doses of 90 cc. per 600 lb. body weight. Brews E, F. and H. not tested.

this is a matter of small importance as the first three brews (A. B. C.) and the last three brews (I. J. K.) were tested.

The results of these tests were quite satisfactory, the average potency of the brews being quite as high as if hill bull antigen had exclusively been employed.

CONCLUSIONS.

(1) A potent anti-rinderpest serum can be prepared from virus producers which have only a moderate susceptibility to the disease.

(2) The continued use of buffalo antigen did not produce any deterioration in the potency of the serum prepared up to one lakh and tenthousand doses involving thirty-four subpassages.

TABLE I.

BUFFALO SERUM, BREW A.

Test animals and controls inoculated with 0.5 cc. of virulent blood from hill bull No. 692—temperature 105° F., vesicles 5th day of attack.

No. of test animal hill bull	Age. Years	Weight. lb.	Dose per 600 lb. weight cc.	Actual dose of serum cc.	Maximum temp. °F.	Vesicles. Day	Result
722 . .	5	192	30	9.6	105.4	Nil	Moderate reaction. Recovery.
723 . .	3	204	30	10.2	105.6	Nil	Moderate reaction. Recovery.
720 . .	2	216	60	21.6	106.2	Nil	Moderate reaction. Recovery.
721 . .	3	192	60	19.2	106.2	8th	Severe reaction. Recovery.
718 . .	3	244	90	36.6	106.4	Nil	Moderate reaction. Recovery.
719 . .	3	230	90	34.5	105.0	Nil	Moderate reaction. Recovery.

Controls. Hill bull No. 725. Temperature 105.2° F., vesicles 6th day. Died 8th day.

BUFFALO SERUM, BREW B.

Test animals and controls inoculated with 0.5 cc. of virulent blood from hill bull No. 963—temperature 104.6° F., vesicles 6th day of attack.

No. of test animal hill bull	Age. Years	Weight. lb.	Dose per 600 lb. weight cc.	Actual dose of serum cc.	Maximum temp. °F.	Vesicles. Day	Result
1227 . .	8	284	30	12.5	105.6	8th	Died 14th day.
1228 . .	8	304	30	15.2	105.5	7th	Died 10th day.
1225 . .	6	392	60	39.2	103.2	Nil	Slight reaction. Recovery.
1226 . .	7	296	60	29.6	104.6	Nil	Moderate reaction. Recovery.
1223 . .	6	304	90	45.6	103.4	Nil	Slight reaction. Recovery.
1224 . .	6	450	90	67.5	103.4	Nil	Slight reaction. Recovery.

Controls. Hill bull 984. Temperature 104.2° F., vesicles 5th day. Bled out 7th day. Buffalo 638. Temperature 105° F., vesicles 7th day. Pled out 9th day.

BUFFALO SERUM, BREW C.

The same virulent blood and controls as for brew B.

No. of test animal hill bull	Age. Years	Weight. lb.	Dose per 600 lb. weight cc.	Actual dose of serum cc.	Maximum temp. °F.	Vesicles. Day	Result
1234 . .	6	408	30	20.4	103.6	9th	Died 14th day.
1233 . .	8	368	30	19.4	103.2	Nil	Slight reaction. Recovery.
1232 . .	8	392	60	39.2	103.4	Nil	Slight reaction. Recovery.
1231 . .	8	408	60	40.8	103.6	Nil	Slight reaction. Recovery.
1230 . .	7	396	90	59.4	103.2	Nil	Slight reaction. Recovery.
1229 . .	6	322	90	48.3	104.6	Nil	Moderate reaction. Recovery.

BUFFALO SERUM, BREW D.

Test animals and controls inoculated with 0.5 c.c. of virulent blood from hill bull No. 1825—temperature 104 °F., vesicles 4th day of attack.

No. of test animal hill bull	Age. Years	Weight. lb.	Dose per 600 lb. weight cc.	Actual dose of serum cc.	Maximum temp. °F.	Vesicles. Day	Result
1842 . .	6	275	30	14	104.4	6th	Severe reaction. Recovered.
1843 . .	6	310	30	15.5	102.2	6th	Died 10th day.
1840 . .	4	350	60	35	104.0	Nil	Moderate reaction. Recovered.
1841 . .	5	250	60	25	104.4	6th	Died 9th day.
1838 . .	7	420	90	63	103.4	6th	Moderate reaction. Recovered.
1839 . .	5	255	90	30	105.0	Nil	Severe reaction. Recovered.

Controls Hill bull 1844. Temperature 104 °F., vesicles 5th day. Bled to death 6th day.

The hill bulls used in testing brew D were in poor condition and weak and were not suitable animals for a test; however, owing to scarcity of animals no others were available.

BUFFALO SERUM, BREW G.

Test animals and controls inoculated with 0.5 cc. of virulent blood from hill bull No. 1806—temperature 104.2 °F., vesicles 6th day of attack.

No. of test animal hill bull	Age. Years	Weight. lb.	Dose per 600 lb. weight cc.	Actual dose of serum cc.	Maximum temp. °F.	Vesicles. Day	Result
1821 . .	9	395	30	19.5	105.0	7th	Severe reaction. Recovered.
1822 . .	10	390	30	19.3	105.0	8th	Severe reaction. Recovered.
1819 . .	8	385	60	38.5	104.6	8th	Died 12th day.
1820 . .	9	330	60	33.0	105.0	9th	Severe reaction. Recovered.
1811 . .	11	340	90	51.0	104.2	Nil	Moderate reaction. Recovered.
1812 . .	9	305	90	45.5	104.4	8th	Moderate reaction. Recovered.

Controls. Hill bull 1823, temperature 105.6 °F., vesicles 5th day. Bled out 6th day. Buffalo 772, temperature 105.4 °F., vesicles 7th day. Bled out 8th day.

BUFFALO SERUM, BREW I.

The same virulent blood and controls as for brew D.

No. of test animal hill bull	Age. Years	Weight. lb.	Dose per 600 lb. weight cc.	Actual dose of serum cc.	Maximum temp. °F.	Vesicles. Day	Result
1836 . .	5	300	30	15	105.0	Nil	Severe reaction. Recovered.
1837 . .	7	525	30	26.5	104.0	Nil	Moderate reaction. Recovered.
1834 . .	5	440	60	44.0	103.8	Nil	Moderate reaction. Recovered.
1835 . .	6	515	90	51.5	104.2	Nil	Moderate reaction. Recovered.
1832 . .	8	450	90	67.5	103.4	Nil	Moderate reaction. Recovered.
1833 . .	6	435	90	51.5	104.2	Nil	Moderate reaction. Recovered.

BUFFALO SERUM, BREW J.

The same virulent blood and controls as for serum brew D.

No. of test animal hill bull	Age. Years	Weight. lb.	Dose per 600 lb. weight cc.	Actual dose of serum cc.	Maximum temp. °F.	Vesicles. Day	Result
1830 . .	7	190	30	9.5	104.0	Nil	Moderate reaction. Recovered.
1831 . .	5	210	30	10.5	104.8	Nil	Severe reaction. Recovered.
1828 . .	8	205	60	20.5	104.6	Nil	Severe reaction. Recovered.
1829 . .	5	385	10	38.5	103.2	Nil	Mild reaction. Recovered.
1826 . .	8	304	90	45.5	104.0	8th	Moderate reaction. Recovered.
1827 . .	4	240	90	36.0	104.4	8th	Moderate reaction. Recovered.

BUFFALO SERUM, BREW K.

Test animals and controls inoculated with 0.5 cc. of virulent blood from hill bull No. 1806—temperature 104.2 °F., vesicles 6th day of attack.

No. of test animal hill bull	Age. Years	Weight. lb.	Dose per 600 lb. weight cc.	Actual dose of serum cc.	Maximum temp. °F.	Vesicles. Day	Result
1815 . .	9	340	30	17.0	104.6	8th	Moderate reaction. Recovered.
1816 . .	7	375	30	18.5	104.6	8th	Moderate reaction. Recovered.
1813 . .	10	327	60	32.5	105.8	8th	Severe reaction. Recovered.
1814 . .	9	330	10	38.0	103.8	7th	Moderate reaction. Recovered.
1817 . .	12	335	10	50.0	104.4	8th	Moderate reaction. Recovered.
1818 . .	9	385	10	57.5	104.2	8th	Moderate reaction. Recovered.

Controls. Hill bull 1823. Temperature 105.6°F., vesicles 5th day. Bled out 6th day. Buffalo 772. Temperature 105.4°F., vesicles 7th day. Bled out 8th day.

TABLE II.

Details of thirty-four subpassages of the rinderpest virus from buffalo to buffalo.

Small plains buffalo	Age	Weight	Amount of V. B. inoculated	V. B. from buffalo control	Maximum temp.	Vesicles	Diarrhoea	Day on which bled a few cc. only	Day on which bled out	REMARKS
No.	Years	lb.	cc.	No.	*F.	Day	Day			
65	1	250	1	Hill bull	103.8	6th	8th	6th	..	Died.
51	1	240	1	Hill bull	105.0	7th	9th	7th	..	Died.
66	1	260	1	65	105.7	6th	9th	6th	..	Discontinued.
55	1	308	1	66	105.3	6th	8th	5th, 6th, 7th	..	Died.
75	4½	375	1	55	105.8	6th	7th	6th	..	Died.
78	1½	320	1	75	106.0	5th	6th	5th and 7th	..	Discontinued.
140	1½	430	1	78	105.4	6th	Nil	6th	7th	
89	1½	336	1	78	105.0	8th	8th	..	9th	
139	1½	380	1	55	106.6	8th	7th	8th	..	Discontinued.
67	1½	345	1	139	104.8	7th	10th	7th	..	Died.
77	1½	265	1	67	104.4	6th	Nil	6th	7th	
304	1½	350	1	77	103.6	8th	Nil	8th	9th	
321	1½	280	1	304	105.0	Nil	8th	7th	..	Died.
437	1½	300	1	426	104.4	Nil	7th	7th	..	Died.
438	1½	310	1	426	104.0	Nil	7th	5th	..	Died.
440	1½	340	1	438	106.0	7th	Nil	6th	7th	

TABLE II—contd.

Details of thirty-four subpassages of the rinderpest virus from buffalo to buffalo—contd.

Small plains buffalo.	Age	Weight		Amount of V. B. inoculated		Maximum temp.		Vesicles		Diarrhoea		Day on which bled a few cc only		Day on which bled out	REMARKS
		lbs.		cc.	No.	° F.		Day		Day					
No.	Years														
76	1½	290		1	89	106.0		10th		9th		5th		12th	
333	1½	308		1	76	103.2		6th		Nd		5th and 6th		8th	
347	1½	200		1	333	105.2		7th		Nd		5th		..	Discontinued.
351	1½	200		1	347	106.0		Nd		Nd		5th and 7th		8th	
346	1½	280		1	333	104.0		Nd		7th		5th		..	Died.
337	2	390		1	346	104.4		6th		7th		5th		..	
393	2	378		1	357	104.6		Nd		7th		5th and 6th		8th	
53	1½	374		1	78	105.2		5th		Nd		5th.		..	Destroyed.
69	1½	340		1	53	103.6		9th		Nd		5th		10th	
308	3	420		1	69	104.6		11th		9th		6th and 7th		12th	
309	1½	360		1	69	106.0		Nd		9th		8th		..	Died.
330	2	388		1	309	105.0		7th		Nd		5th and 8th		9th	
345	1½	380		1	330	106.0		Nd		9th		5th		..	Died.
350	1½	230		1	345	103.6		7th		8th		5th		..	Died.
375	2	413		1	350	104.2		Nd		Nd		5th		..	Discontinued.
396	1½	392		1	375	104.2		Nd		7th		..		..	Died.
358	2	390		1	345	104.2		8th		9th		5th		10th	
378	1½	350		1	358	106.0		8th		9th		5th		9th	

A comparison between the reaction to rinderpest in Kumaun Hill Bull and Young Bareilly Plains Buffalo virus producers.

To obtain an accurate estimate of the reaction, the charts of 100 consecutive animals of both types have been taken and from these a composite chart has been prepared for each showing the average of each phase of the reaction.

-- Figs. 2 and 3 and Tables III and IV from which they were prepared are shown below.

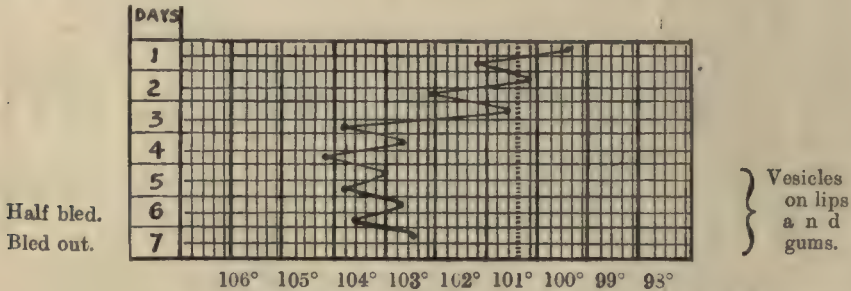


Fig. 2. Showing average of 100 consecutive reactions of Hill Bull virus producers.

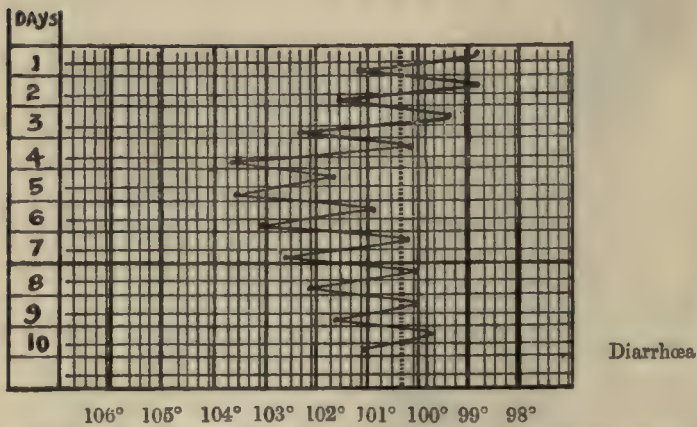


Fig. 3. Showing average of 100 consecutive reactions of Buffalo virus producers.

Some explanation of the method of calculation is necessary. For the temperatures the method is obvious. In the case of such a symptom as vesicles or diarrhoea or in the case of bleedings an entry has only been made in the chart when over 50 per cent. of the animals are affected.

Many of the buffaloes were not bled although they could have been. This is because the inoculation was experimental and virus was only taken when required for hyperimmunizing purposes. Hence bleedings have not been considered in the preparation of the buffalo composite chart.

The reaction in Kumaun hill bulls which are probably the most susceptible Indian country-bred cattle is much earlier and more severe than in young Bareilly plains buffaloes. The temperature rises earlier and higher; vesicles are almost invariably present, appear earlier, and are nearly always situated on the lower lip, and on the under surface of the free portion of the tongue. Owing to the acute course of the disease they are generally bled before the onset of diarrhoea.

In young Bareilly plains buffaloes the temperature develops later and is not so high. Vesicles are not nearly so constant and when they appear are usually seen only on the lips.

—	Vesicles. Per cent.	Diarrhoea.	High temp. (104 °F. morning)	High temp. Vesicles Diarrhoea	No reaction
Hill bulls . .	98	28	48	12	1
Buffaloes . .	36	67	20	7	21

TABLE III.

No. of hill bull virus producer	1st DAY						2nd DAY					
	M. T.	E. T.	V.	D.	$\frac{1}{2}$ Bl.	B. O.	M. T.	E. T.	V.	D.	$\frac{1}{2}$ Bl.	B. O.
296	99.2	101.0	..	..	..	..	98.4	101.6	..	..	..	..
298	98.7	100.4	..	..	..	..	98.4	103.2	..	..	..	..
298	98.7	100.0	..	..	..	..	99.0	104.4	..	..	..	..
294	98.6	100.4	..	..	..	..	98.4	101.2	..	..	..	..
292	100.4	100.4	..	..	..	..	100.0	100.6	..	..	..	..
290	99.6	101.2	..	..	..	..	100.8	100.2	..	..	..	..
291	98.6	101.6	..	..	..	..	99.8	103.0	..	..	..	..
289	102.0	101.6	..	..	..	..	101.4	101.6	..	..	..	..
286	100.4	102.0	..	..	..	..	102.0	104.5	..	..	..	..
283	100.0	101.2	..	..	..	..	101.0	105.2	..	..	..	..
274	101.2	101.6	..	..	..	..	100.6	104.6	..	..	..	..
287	100.6	101.6	..	..	..	..	101.2	103.0	..	..	..	..
283	101.3	101.3	..	..	..	..	101.0	102.4	..	..	..	..
288	101.0	101.2	..	..	..	..	100.0	102.2	..	..	..	..
285	100.4	101.4	..	..	..	..	101.2	102.2	..	..	..	..
267	100.0	101.6	..	..	..	..	101.4	103.6	..	..	..	..
270	100.2	102.0	..	..	..	..	100.4	102.0	..	..	..	..
280	100.0	101.2	..	..	..	..	101.2	103.2	..	..	..	..
284	101.0	101.6	..	..	..	..	101.8	104.8	..	..	..	..
271	99.4	100.6	..	..	..	..	100.0	102.3	..	..	..	..
258	100.4	101.4	..	..	..	..	100.2	101.6	..	..	..	..
264	99.6	100.8	..	..	..	..	100.2	101.6	..	..	..	..
250	100.0	100.4	..	..	..	..	100.1	101.4	..	..	..	..
269	99.3	100.0	..	..	..	..	99.6	101.8	..	..	..	..
277	100.0	102.4	..	..	..	..	101.0	103.0	..	..	..	..
255	100.3	102.0	..	..	..	..	100.2	104.2	..	..	..	..
252	99.2	100.8	..	..	..	..	100.4	101.6	..	..	..	..
273	101.0	102.4	..	..	..	..	101.2	104.2	..	..	..	..
266	99.0	101.0	..	..	..	..	100.2	102.6	..	..	..	..
286	100.0	101.3	..	..	..	..	101.0	102.0	..	..	..	..
279	100.0	101.4	..	..	..	..	101.0	101.7	..	..	..	..
281	100.0	101.4	..	..	..	..	100.2	101.4	..	..	..	..
251	98.2	101.6	..	..	..	..	100.2	102.0	..	..	..	..

M.T.—morning temperature. E.T.—evening temperature. V.—vesicles showing. D.—diarrhoea.

TABLE III—*contd.*

3 RD DAY						4TH DAY					
M. T.	E. T.	V.	D.	‡ Bl.	B. O.	M. T.	E. T.	V.	D.	‡ Bl.	B. O.
101-4	104-4	..	..	..	..	103-4	104-8	..	..	..	..
103-6	106-2	..	..	..	..	104-0	106-2	..	..	..	..
103-0	104-0	..	..	..	..	104-0	105-8	..	..	..	..
102-0	102-0	..	..	..	..	102-0	103-2	..	..	..	..
100-8	104-0	..	..	..	..	101-2	104-6	..	..	..	..
101-2	103-8	..	..	..	..	102-0	104-0	..	..	..	..
102-0	103-2	..	..	..	..	102-4	104-2	..	..	..	..
102-0	103-6	..	..	..	..	101-6	104-0	..	..	..	..
105-3	104-0	..	..	..	..	104-0	104-0	..	..	..	..
103-1	105-0	..	..	..	..	104-0	105-0	..	..	..	..
103-0	104-0	..	..	..	..	104-0	104-6	..	..	..	..
104-0	106-0	..	..	..	..	105-2	106-0	..	..	..	..
103-8	104-4	..	..	..	..	104-2	105-0	..	..	..	..
105-0	107-0	..	..	..	..	105-2	106-0	..	..	..	..
102-2	104-8	..	..	..	..	102-4	105-0	..	..	..	..
103-4	105-0	..	..	..	..	104-4	105-0	..	..	..	..
104-0	105-6	..	..	..	..	105-4	106-0	..	..	..	..
101-4	104-0	..	..	..	..	103-0	104-0	..	..	..	..
103-2	103-6	..	..	..	..	103-2	105-8	..	..	..	..
101-0	103-0	..	..	..	..	102-0	106-0	..	..	..	..
101-6	104-0	..	..	..	..	103-0	104-6	..	..	..	..
103-0	103-6	..	..	..	..	104-0	105-2	..	..	..	..
101-0	104-2	..	..	..	..	101-8	102-4	..	..	..	..
99-4	106-2	..	..	..	..	105-0	106-0	..	..	..	..
101-8	105-6	..	..	..	..	105-2	105-4	..	..	..	..
102-8	102-8	..	..	..	..	103-6	104-4	..	..	..	..
101-2	103-6	..	..	..	..	103-0	104-2	..	..	..	..
103-0	103-6	..	..	..	..	103-4	104-6	..	..	..	..
100-0	104-0	..	..	..	..	102-2	104-0	..	..	..	..
102-0	104-6	..	..	..	..	104-0	105-0	..	..	..	..
102-3	103-8	..	..	..	..	103-0	105-0	..	..	..	..
102-2	105-0	..	..	..	..	104-2	100-0	..	..	..	..
103-4	103-6	..	..	..	..	103-4	105-0	..	..	..	..

‡ Bl.—half bleeding taken. B.O.—Bled out to death.

TABLE III—*contd.*

No. of hill bull virus producer	5TH DAY						6TH DAY					
	M. T.	E. T.	V.	D.	$\frac{1}{2}$ H.	B. O.	M. T.	E. T.	V.	D.	$\frac{1}{2}$ H.	B. O.
296 . . .	104-0	104-0	..	..	..	..	103-4	..	×	..	..	×
298 . . .	105-0	105-8	..	..	..	..	105-0	..	×	×	..	×
293 . . .	104-8	105-0	×	..	..	..	103-0	..	..	..	..	×
294 . . .	102-6	103-6	..	..	..	..	103-0	..	×	..	..	×
292 . . .	103-6	103-0	..	..	..	..	103-0	104-6	..	..	..	..
290 . . .	103-0	103-0	×	..	×	..	102-6	..	..	..	..	×
291 . . .	104-2	104-4	..	..	×	..	104-4	..	×	..	..	×
289 . . .	102-0	104-0	..	..	..	..	103-0	..	×	..	..	×
256 . . .	104-8	104-0	×	..	×	..	103-0	..	..	×	..	×
263 . . .	104-8	103-2	×	..	×	..	102-6	..	..	×	..	×
274 . . .	104-0	103-2	×	..	×	..	102-4	..	..	..	..	×
257 . . .	104-8	104-6	×	..	×	..	103-4	..	..	..	..	×
253 . . .	104-8	104-4	×	..	×	..	103-6	..	..	..	..	×
288 . . .	104-4	103-6	×	..	×	..	103-2	..	..	..	..	×
285 . . .	104-6	104-4	×	..	..	..	103-2	..	..	..	..	×
267 . . .	105-2	104-0	×	..	×	..	102-8	..	..	..	..	×
279 . . .	104-4	104-4	×	..	×	..	103-6	..	..	..	..	×
280 . . .	102-6	103-4	..	..	..	..	102-4	104-0	..	..	..	..
284 . . .	104-0	104-8	..	..	×	..	104-0	..	×	..	..	×
271 . . .	104-8	103-6	×	..	×	..	103-0	..	..	..	..	×
252 . . .	103-6	105-0	×	..	×	..	104-2	..	..	..	..	×
264 . . .	104-8	..	×	..	..	×	..	..	..	..	..	..
250 . . .	101-0	104-0	..	..	×	..	102-4	..	×	..	..	×
266 . . .	105-6	105-0	..	..	×	..	104-0	..	×	×	..	×
277 . . .	104-5	104-5	..	..	×	..	104-6	105-6	..	..	..	..
255 . . .	104-0	104-6	..	..	×	..	104-0	104-4	..	..	..	..
252 . . .	104-0	104-8	..	..	×	..	104-0	104-0	×	..	..	..
273 . . .	104-0	103-0	×	..	×	..	103-0	..	..	..	..	×
260 . . .	102-6	103-2	..	..	..	..	102-6	103-6	..	..	..	..
236 . . .	104-4	103-6	×	..	×	..	103-6	..	..	..	..	×
279 . . .	104-0	104-2	×	..	×	..	103-2	..	..	..	..	×
281 . . .	104-8	104-4	..	..	×	..	104-4	..	×	..	..	×
251 . . .	103-0	103-4	×	..	×	..	103-0	..	..	..	..	×

TABLE III—*contd.*

7TH DAY						8TH DAY						9TH DAY					
M. T.	E. T.	V.	D.	† Bl.	B. O.	M. T.	E. T.	V.	D.	† Bl.	B. O.	M. T.	E. T.	V.	D.	† Bl.	B. O.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
104-2	106-2	..	..	..	..	100-0	..	×	..	..	×	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
103-2	..	×	..	..	×	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
104-6	..	×	..	..	×	..	..	..	..	..	..	..	..	..	..	..	..
104-4	..	×	..	..	×	..	..	..	..	..	..	..	..	..	..	..	..
103-2	..	..	..	..	×	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
103-4	..	×	..	..	×	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

TABLE III—*contd.*

No. of hill bull virus producer	1ST DAY						2nd DAY					
	M. T.	E. T.	V.	D.	† Bl.	B. O.	M. T.	E. T.	V.	D.	† Bl.	B. O.
233 . . .	106-6	101-2	..	..	..	..	97-2	102-6	..	..	..	..
202 . . .	100-0	102-2	..	..	..	..	101-6	103-2	..	..	..	..
214 . . .	98-4	101-4	..	..	..	..	101-4	102-0	..	..	..	..
276 . . .	100-0	100-6	..	..	..	..	97-4	101-6	..	..	..	..
247 . . .	100-0	101-2	..	..	..	..	100-0	101-4	..	..	..	..
232 . . .	102-0	101-8	..	..	..	..	100-6	102-2	..	..	..	..
275 . . .	100-2	102-6	..	..	..	..	100-0	102-4	..	..	..	..
254 . . .	98-0	102-0	..	..	..	..	100-4	102-2	..	..	..	..
272 . . .	98-4	102-0	..	..	..	..	101-0	102-2	..	..	..	..
260 . . .	99-8	101-0	..	..	..	..	101-4	102-0	..	..	..	..
259 . . .	99-2	102-3	..	..	..	..	101-2	101-8	..	..	..	..
233 . . .	100-0	101-6	..	..	..	..	101-6	102-6	..	..	..	..
237 . . .	93-2	101-6	..	..	..	..	97-2	101-2	..	..	..	..
232 . . .	97-0	101-2	..	..	..	..	100-0	100-0	..	..	..	..
246 . . .	100-0	101-4	..	..	..	..	101-4	104-6	..	..	..	..
245 . . .	100-2	102-2	..	..	..	..	101-0	102-2	..	..	..	..
233 . . .	100-0	102-4	..	..	..	..	101-2	102-6	..	..	..	..
224 . . .	100-2	101-2	..	..	..	..	100-2	101-2	..	..	..	..
218 . . .	100-6	102-0	..	..	..	..	101-2	102-2	..	..	..	..
241 . . .	98-6	102-0	..	..	..	..	100-6	102-0	..	..	..	..
242 . . .	99-2	101-7	..	..	..	..	101-6	100-4	..	..	..	..
234 . . .	100-0	100-0	..	..	..	..	97-2	101-0	..	..	..	..
231 . . .	98-4	101-2	..	..	..	..	101-0	104-0	..	..	..	..
222 . . .	100-0	100-4	..	..	..	..	100-0	102-2	..	..	..	..
223 . . .	100-0	100-6	..	..	..	..	101-2	102-0	..	..	..	..
226 . . .	99-2	100-4	..	..	..	..	98-2	101-8	..	..	..	..
220 . . .	99-2	101-2	..	..	..	..	97-2	101-2	..	..	..	..
217 . . .	100-0	100-6	..	..	..	..	100-0	100-4	..	..	..	..
218 . . .	99-6	101-7	..	..	..	..	100-6	102-0	..	..	..	..
216 . . .	100-0	101-4	..	..	..	..	100-6	102-0	..	..	..	..
215 . . .	99-6	101-0	..	..	..	..	98-0	101-2	..	..	..	..
213 . . .	98-2	100-4	..	..	..	..	97-2	101-8	..	..	..	..
212 . . .	99-4	102-0	..	..	..	..	100-6	101-2	..	..	..	..

TABLE III—*contd.*

3RD DAY						4TH DAY					
M. T.	E. T.	V.	D.	† Bl.	B. O.	M. T.	E. T.	V.	D.	† Bl.	B. O.
101-6	103-7	..	..	..	..	102-8	102-6	..	..	..	..
104-4	105-6	..	..	..	..	104-5	106-0	..	..	..	..
180-0	102-0	..	..	..	..	101-7	102-0	..	×	..	..
101-0	103-6	..	..	..	..	103-6	104-8	..	..	..	..
101-4	102-6	..	..	..	..	101-0	102-0	..	..	..	..
100-0	103-4	..	..	..	..	102-2	104-2	..	..	..	..
102-0	104-4	..	..	..	..	103-8	105-0	..	..	..	..
103-6	105-2	..	..	..	..	102-4	104-0	..	..	..	..
104-0	104-6	..	..	..	..	104-0	105-2	..	..	..	..
102-4	103-4	..	..	..	..	103-0	103-6	..	..	..	..
103-6	105-2	..	..	..	..	104-8	105-8	..	..	..	..
102-2	103-8	..	..	..	..	102-6	103-0	..	..	..	..
99-0	104-0	..	..	..	..	100-0	102-0	..	..	..	..
102-0	103-8	..	..	..	..	102-2	104-0	..	..	..	..
103-0	105-6	..	..	..	..	102-6	..	×	..	..	×
102-0	105-0	..	..	..	..	102-4	103-0	..	..	..	..
98-2	100-0	..	..	..	..	99-2	100-0	..	×	..	..
100-0	103-0	..	..	..	..	101-0	103-0	..	..	..	..
103-0	105-0	..	..	..	..	103-0	106-2	..	..	..	..
101-4	104-4	..	..	..	..	103-4	105-8	..	..	..	..
100-0	103-0	..	..	..	..	102-0	104-8	..	..	..	..
99-2	103-6	..	..	..	..	101-6	104-2	..	..	..	..
103-0	102-2	..	..	..	..	102-0	103-8	..	..	..	..
103-2	103-0	..	..	..	..	102-4	104-0	..	..	..	..
103-0	100-4	..	..	..	..	104-0	103-0	..	..	..	..
101-4	104-4	..	..	..	..	103-0	104-0	..	..	..	..
99-0	102-4	..	..	..	..	102-2	102-6	..	..	..	..
100-0	103-0	..	..	..	..	101-6	103-0	..	..	..	..
104-4	105-6	..	..	..	..	104-4	105-8	..	..	..	..
102-2	103-4	..	..	..	..	103-4	105-4	..	..	..	..
101-2	99-6	..	..	..	..	99-2	102-8	..	..	..	..
99-4	103-0	..	..	..	..	102-0	103-2	..	..	..	..
101-0	102-8	..	..	..	..	101-2	103-4	..	..	..	..

PREPARATION OF ANTI-RINDERPEST SERUM

TABLE III—*contd.*

No. of hill bull virus producer	5TH DAY						6TH DAY					
	M. T.	E. T.	V.	D.	† Bl.	B. O.	M. T.	E. T.	V.	D.	† Bl.	B. O.
231	103-4	103-0	..	..	..	..	103-0	103-8	..	..	X	..
232	103-0	107-0	X	..	..	..	104-2	..	..	X	..	X
244	07-2	..	X	..	..	X	..	..	..	..	..	..
276	103-0	103-0	..	..	..	..	103-0	103-6	..	..	..	..
247	100-6	101-7	..	..	..	..	99-2	101-5	..	..	..	..
232	104-4	103-0	..	..	..	..	102-8	103-5	..	..	..	..
275	104-0	105-0	..	..	..	..	103-0	..	X	..	..	X
254	103-0	104-4	X	..	X	..	102-0	..	..	..	..	X
272	104-0	104-6	X	..	X	..	101-6	..	..	X	..	X
260	103-0	..	X	..	..	X	..	..	..	..	..	..
259	104-6	105-2	X	..	..	..	104-6	..	..	X	..	X
238	102-6	..	X	X	..	X	..	..	..	..	..	..
237	102-0	..	X	..	..	X	..	..	..	..	..	..
232	102-0	..	X	..	..	X	..	..	..	..	..	..
246	..	..	..	..	..	..	..	..	..	..	..	..
245	97-2	..	X	..	..	X	..	..	..	..	..	..
233	97-0	..	X	..	..	X	..	..	..	..	..	..
234	101-6	..	X	..	..	X	..	..	..	..	..	..
248	103-4	103-2	X	..	..	..	99-5	..	..	..	..	X
241	103-0	105-0	..	..	..	..	102-0	102-3	X	..	X	..
242	103-0	..	X	..	..	X	..	..	..	..	..	..
234	103-2	104-2	..	..	..	..	103-0	..	X	X	..	X
231	102-0	..	X	X	..	X	..	..	..	..	..	..
232	102-0	..	X	..	..	X	..	..	..	..	..	..
233	103-0	101-8	..	..	..	..	97-0	..	X	..	..	X
236	103-2	104-8	..	..	..	..	102-0	..	X	..	..	X
220	102-0	102-4	..	..	..	..	101-0	..	X	..	..	X
217	102-0	..	X	..	..	X	..	..	..	..	..	..
218	105-0	103-2	X	..	X	..	103-0	..	..	..	..	X
216	104-8	103-2	X	..	X	..	103-0	..	..	..	..	X
215	100-0	..	X	..	..	X	..	..	..	..	..	..
213	102-0	102-2	X	..	X	..	102-2	..	..	..	..	X
212	102-2	102-6	..	..	..	..	101-8	101-6	..	..	..	..

TABLE III—contd.

[illegible]

PREPARATION OF ANTI-RINDERPEST SERUM

TABLE III—*contd.*

No. of hill bull virus producer	1st DAY						2nd DAY					
	M. T.	E. T.	V.	D.	½ Bl.	B. O.	M. T.	E. T.	V.	D.	½ Bl.	B. O.
211 . . .	100-0	101-2	..	..	..	..	100-0	103-0	..	..	..	..
210 . . .	99-6	100-4	..	..	..	..	99-2	102-4	..	..	..	..
209 . . .	99-2	101-7	..	..	..	..	99-6	102-0	..	..	..	..
208 . . .	99-6	101-2	..	..	..	..	100-0	102-0	..	..	..	..
175 . . .	100-0	101-4	..	..	..	..	101-0	103-0	..	..	..	..
178 . . .	99-2	101-0	..	..	..	..	100-1	104-0	..	..	..	..
170 . . .	100-4	101-4	..	..	..	..	101-0	102-0	..	..	..	..
106 . . .	100-0	101-6	..	..	..	..	100-2	102-4	..	..	..	..
158 . . .	100-0	103-2	..	..	..	..	102-0	102-6	..	..	..	..
176 . . .	99-6	101-4	..	..	..	..	101-2	104-4	..	..	..	..
115 . . .	99-6	100-8	..	..	..	..	100-0	103-0	..	..	..	..
159 . . .	99-2	100-6	..	..	..	..	100-0	102-6	..	..	..	..
154 . . .	99-2	101-4	..	..	..	..	99-2	100-0	..	..	..	..
166 . . .	99-6	101-2	..	..	..	..	100-0	101-6	..	..	..	..
163 . . .	98-2	101-2	..	..	..	..	100-2	101-0	..	..	..	..
190 . . .	100-0	101-4	..	..	..	..	99-6	103-2	..	..	..	..
187 . . .	98-6	100-6	..	..	..	..	99-6	102-6	..	..	..	..
205 . . .	100-2	100-0	..	..	..	..	98-2	101-4	..	..	..	..
182 . . .	100-4	100-2	..	..	..	..	100-2	101-2	..	..	..	..
192 . . .	99-2	101-2	..	..	..	..	100-2	101-4	..	..	..	..
208 . . .	100-0	100-2	..	..	..	..	98-6	101-4	..	..	..	..
137 . . .	99-6	100-8	..	..	..	..	100-4	103-4	..	..	..	..
171 . . .	101-2	101-2	..	..	..	..	100-6	100-6	..	..	..	..
169 . . .	99-6	100-4	..	..	..	..	100-0	101-0	..	..	..	..
192 . . .	98-0	102-2	..	..	..	..	101-2	101-2	..	..	..	..
179 . . .	99-4	101-8	..	..	..	..	101-2	102-2	..	..	..	..
162 . . .	100-0	101-6	..	..	..	..	100-0	102-2	..	..	..	..
191 . . .	98-6	100-6	..	..	..	..	98-7	98-2	..	..	..	..
177 . . .	98-7	100-2	..	..	..	..	99-4	104-4	..	..	..	..
204 . . .	99-2	101-2	..	..	..	..	100-2	102-0	..	..	..	..
100 . . .	98-2	101-2	..	..	..	..	98-6	102-2	..	..	..	..
180 . . .	98-2	99-6	..	..	..	..	98-4	101-0	..	..	..	..
119 . . .	98-4	101-2	..	..	..	..	99-6	100-6	..	..	..	..
122 . . .	98-6	101-2	..	..	..	..	99-2	101-4	..	..	..	..

TABLE III—*contd.*

3RD DAY						4TH DAY					
M. T.	E. T.	V.	D.	$\frac{1}{2}$ Bl.	B. O.	M. T.	E. T.	V.	D.	$\frac{1}{2}$ Bl.	B. O.
101-4	101-4	..	..	..	..	101-0	102-0	..	..	..	..
101-0	102-6	..	..	..	..	100-4	103-0	..	..	..	..
100-2	102-8	..	..	..	..	100-4	100-6	..	..	..	..
101-0	102-0	..	..	..	..	100-0	102-2	..	..	..	..
102-4	104-0	..	..	..	..	103-0	105-0	..	..	..	..
103-0	103-4	..	..	..	..	103-0	105-0	..	..	..	..
101-0	106-0	..	..	..	..	103-2	105-2	..	..	..	..
102-0	106-4	..	..	..	..	104-0	105-4	..	..	..	..
102-6	104-6	..	..	..	..	104-2	100-0	..	..	..	..
103-0	104-8	..	..	..	..	103-0	105-4	..	..	..	..
101-8	103-6	..	..	..	..	102-4	104-0	..	..	..	..
102-0	105-0	..	..	..	..	104-0	104-8	..	x	..	..
100-0	102-6	..	..	..	..	100-2	103-0	..	..	..	..
101-4	104-4	..	..	..	..	104-0	105-0	..	..	..	..
100-0	104-0	..	..	..	..	103-0	104-0	..	..	..	..
100-0	101-2	..	..	..	..	102-6	103-0	..	..	..	..
101-0	104-0	..	..	..	..	101-2	103-0	..	..	..	..
100-0	102-6	..	..	..	..	100-0	103-0	..	..	..	..
100-2	103-4	..	..	..	..	101-4	104-0	..	..	..	..
102-6	102-2	..	..	..	..	103-0	104-6	..	..	..	..
100-0	101-6	..	..	..	..	101-2	104-0	..	..	..	..
103-0	105-6	..	..	..	..	105-0	106-2	..	..	..	..
100-0	105-0	..	..	..	..	103-0	105-4	..	..	..	..
100-0	101-6	..	..	..	..	101-4	103-8	..	..	..	..
101-0	107-2	..	..	..	..	104-0	106-0	x	..	..	..
102-2	104-6	..	..	..	..	104-0	105-2	..	..	..	..
101-0	104-8	..	..	..	..	104-0	107-2	..	..	..	..
98-0	101-2	..	..	..	..	98-0	101-2	..	..	..	..
101-2	103-0	..	..	..	..	102-6	103-6	..	..	..	..
101-2	101-6	..	..	..	..	100-6	103-0	..	..	..	..
100-2	105-6	..	..	..	..	104-0	106-0	..	..	..	..
100-4	103-2	..	..	..	..	102-4	104-2	..	..	..	..
100-0	105-4	..	..	..	..	103-2	104-4	..	..	..	..
100-0	104-2	..	..	..	..	103-0	105-2	..	..	..	..

PREPARATION OF ANTI-RINDERPEST SERUM

TABLE III—*contd.*

No. of hill bull virus producer			5TH DAY					6TH DAY						
			M. T.	E. T.	V.	D.	† Bl.	B. O.	M. T.	E. T.	V.	D.	† Bl.	B. O.
211	.	.	100-2	..	×	..	..	×	..	..	..	..	..	..
210	.	.	101-6	..	×	..	..	×	..	..	..	..	..	..
209	.	.	100-2	101-6	..	..	..	..	100-0	103-0	..	..	..	..
208	.	.	100-0	..	×	..	..	×	..	..	..	..	..	..
175	.	.	104-0	104-2	..	..	..	..	103-4	..	×	..	..	×
173	.	.	104-0	103-6	..	..	..	..	103-4	105-0	..	..	..	..
170	.	.	104-2	105-0	..	..	..	..	103-0	..	×	..	..	×
106	.	.	105-0	106-0	..	..	..	..	104-0	..	×	..	..	×
153	.	.	104-6	105-4	×	..	×	..	102-2	..	..	×	..	×
176	.	.	104-0	103-2	×	..	×	..	102-2	..	..	×	..	×
115	.	.	102-2	..	×	..	..	×	..	..	..	..	..	..
159	.	.	104-6	104-2	×	..	×	..	103-0	..	..	..	..	×
154	.	.	100-6	..	×	×	..	×	..	..	..	..	..	..
166	.	.	104-0	104-0	×	..	×	..	102-0	..	..	×	..	×
163	.	.	103-0	104-0	..	..	..	..	103-0	104-0	×	..	×	..
199	.	.	103-0	..	×	×	..	×	..	..	..	..	..	..
187	.	.	100-0	100-0	..	..	..	..	93-2	..	×	×	..	×
206	.	.	99-8	101-4	..	×	..	..	100-0	..	×	..	..	×
182	.	.	103-0	103-8	×	..	×	..	103-0	..	..	..	..	×
101	.	.	103-2	104-6	..	..	..	..	103-0	..	×	..	..	×
201	.	.	101-0	98-2	×	..	×	..	..	..	..	..	..	×
137	.	.	104-6	105-4	×	..	×	..	102-4	..	..	×	..	×
171	.	.	102-0	..	×	..	..	×	..	..	..	..	..	..
100	.	.	103-0	103-4	..	..	..	..	102-2	102-0	×	..	×	..
192	.	.	104-0	..	..	..	..	×	..	..	..	..	..	..
179	.	.	103-6	104-2	..	..	..	..	103-0	103-6	..	..	..	..
102	.	.	106-0	104-4	..	..	..	..	104-2	105-2	..	..	..	..
191	.	.	98-0	..	×	..	..	×	..	..	..	..	..	..
177	.	.	102-4	104-2	..	..	..	..	103-2	105-0	..	..	..	..
204	.	.	102-4	101-4	..	×	..	..	101-0	..	×	..	..	×
109	.	.	104-4	105-0	..	..	..	..	104-2	105-0	..	×	..	..
180	.	.	102-6	105-0	..	..	..	..	101-6	103-0	×	..	×	..
119	.	.	103-0	104-2	×	..	..	..	102-2	..	..	..	..	×
120	.	.	103-9	104-2	..	..	..	..	102-2	..	×	×	..	×

PREPARATION OF ANTI-RINDERPEST SERUM

TABLE IV

No. of buffalo virus producer	1ST DAY						2ND DAY					
	M. T.	E. T.	V.	D.	$\frac{1}{2}$ Bl.	B. O.	M. T.	E. T.	V.	D.	$\frac{1}{2}$ Bl.	B. O.
208 . . .	99-2	101-4	..	..	..	..	99-4	100-0	..	..	..	..
76 . . .	98-2	101-6	..	..	..	..	98-5	101-4	..	..	..	..
65 . . .	99-0	101-3	..	..	..	..	97-3	102-0	..	..	..	..
51 . . .	98-0	101-0	..	..	..	..	97-2	102-3	..	..	..	..
74 . . .	97-0	101-4	..	..	..	..	99-0	101-9	..	..	..	..
66 . . .	99-8	101-6	..	..	..	..	99-2	102-2	..	..	..	..
61 . . .	98-4	101-0	..	..	..	..	98-0	102-0	..	..	..	..
62 . . .	99-6	100-8	..	..	..	..	98-2	101-8	..	..	..	..
56 . . .	101-2	101-8	..	..	..	..	100-2	101-8	..	..	..	..
59 . . .	101-0	102-0	..	..	..	..	100-6	102-0	..	..	..	..
181 . . .	100-4	101-6	..	..	..	..	98-6	101-4	..	..	..	..
71 . . .	100-2	102-2	..	..	..	..	101-0	101-6	..	..	..	..
55 . . .	98-6	101-2	..	..	..	..	98-4	100-6	..	..	..	..
54 . . .	99-4	101-6	..	..	..	..	100-4	100-4	..	..	..	..
52 . . .	98-6	100-2	..	..	..	..	98-6	101-8	..	..	..	..
57 . . .	99-4	101-2	..	..	..	..	98-2	103-2	..	..	..	..
106 . . .	98-2	100-0	..	..	..	..	98-2	103-4	..	..	..	..
132 . . .	98-6	101-2	..	..	..	..	98-2	101-4	..	..	..	..
52 . . .	98-2	100-0	..	..	..	..	98-0	100-0	..	..	..	..
75 . . .	100-0	100-6	..	..	..	..	98-2	101-8	..	..	..	..
78 . . .	98-2	101-6	..	..	..	..	100-0	102-2	..	..	..	..
90 . . .	98-6	102-2	..	..	..	..	100-2	101-6	..	..	..	..
67 . . .	98-6	101-6	..	..	..	..	98-2	102-0	..	..	..	..
60 . . .	99-4	101-2	..	..	..	..	98-2	101-4	..	..	..	..
140 . . .	100-0	101-6	..	..	..	..	99-2	101-8	..	..	..	..
53 . . .	99-4	102-0	..	..	..	..	98-6	101-4	..	..	..	..
89 . . .	100-2	100-2	..	..	..	..	99-2	101-4	..	..	..	..
58 . . .	98-8	101-4	..	..	..	..	98-4	101-2	..	..	..	..
147 . . .	98-6	100-8	..	..	..	..	99-2	103-2	..	..	..	..
79 . . .	98-1	101-0	..	..	..	..	98-4	101-4	..	..	..	..
137 . . .	99-2	101-4	..	..	..	..	100-4	101-6	..	..	..	..
63 . . .	99-2	100-6	..	..	..	..	98-2	102-6	..	..	..	..
104 . . .	98-0	101-2	..	..	..	..	98-6	102-4	..	..	..	..

TABLE IV—*contd.*

3RD DAY						4TH DAY						5TH DAY					
M. T.	E. T.	V.	D.	BL.	B. O.	M. T.	E. T.	V.	D.	BL.	B. O.	M. T.	E. T.	V.	D.	BL.	B. O.
99-7	101-2	..	..	..	..	102-8	104-6	..	..	..	..	100-6	103-2	..	..	..	..
98-6	102-4	..	..	..	..	101-2	102-2	..	..	..	..	103-0	103-6	..	..	..	..
97-4	102-0	..	..	..	..	101-2	103-0	..	..	..	..	103-2	103-4	..	..	..	..
95-0	101-4	..	..	..	..	100-2	102-0	..	..	..	..	103-2	103-4	..	..	..	..
103-2	104-0	..	..	..	..	103-8	105-2	..	..	..	..	102-2	104-8	..	..	..	..
100-4	104-2	..	..	..	..	105-2	106-2	..	..	..	..	103-6	104-0	..	..	..	..
100-2	100-2	..	..	..	..	103-6	102-4	..	..	..	..	105-4	103-0	..	..	..	..
101-8	101-4	..	..	..	..	99-4	102-6	..	..	..	..	99-2	102-2	..	..	..	..
100-4	103-0	..	..	..	..	103-0	105-2	..	..	..	..	105-0	106-0	..	..	..	..
101-2	103-8	..	..	..	..	103-6	106-2	..	..	..	..	105-2	105-0	..	..	..	..
101-8	104-0	..	..	..	..	102-0	104-2	..	..	..	..	104-0	105-6	×	..	..	..
98-6	104-0	..	..	..	..	102-2	104-2	..	..	..	..	104-0	106-0	..	..	..	..
99-4	101-6	..	..	..	..	102-0	105-2	..	..	..	..	102-8	105-0	..	..	..	..
100-2	102-0	..	..	..	..	100-2	102-2	..	..	..	..	99-6	102-2	..	..	..	..
100-2	101-2	..	..	..	..	101-0	102-6	..	..	..	..	101-4	106-0	..	..	..	..
100-2	101-4	..	..	..	..	99-8	103-6	..	..	..	..	102-8	104-4	..	..	..	..
103-0	103-0	..	..	..	..	104-0	105-0	..	..	..	..	103-0	104-0	..	..	..	..
98-4	104-0	..	..	..	..	102-2	104-2	..	..	..	..	104-2	106-6	..	..	..	..
98-4	103-8	..	..	..	..	103-2	102-4	..	..	..	..	101-2	103-8	..	..	..	..
99-2	103-0	..	..	..	..	103-0	104-0	..	..	..	..	104-0	103-6	..	..	..	..
102-8	106-0	..	..	..	..	103-0	106-0	..	..	..	..	102-2	103-2	×	..	..	..
98-4	104-0	..	..	..	..	100-2	105-2	..	..	..	..	104-0	104-0	..	..	..	..
101-0	104-8	..	..	..	..	102-8	104-8	..	..	..	..	102-6	104-0	..	..	..	..
101-4	104-4	..	..	..	..	103-6	106-0	..	..	..	..	103-6	105-2	..	..	..	..
98-6	103-2	..	..	..	..	101-4	105-4	..	..	..	..	101-2	105-0	..	..	..	..
101-4	103-8	..	..	..	..	100-4	105-2	..	..	..	..	102-3	103-4	×	..	×	..
99-6	101-4	..	..	..	..	100-2	106-0	..	..	..	..	103-8	106-0	..	..	..	..
98-4	102-2	..	..	..	..	101-2	102-0	..	..	..	..	98-4	102-8	..	..	..	..
101-2	102-4	..	..	..	..	98-7	105-0	..	..	..	..	100-0	103-0	..	..	..	..
98-6	103-8	..	..	..	..	101-2	105-0	..	..	..	..	101-0	104-0	..	..	..	..
99-6	102-6	..	..	..	..	100-0	104-2	..	..	..	..	99-6	102-2	..	..	..	..
99-7	102-2	..	..	..	..	99-4	103-0	..	..	..	..	100-2	103-0	..	..	..	..
98-6	101-6	..	..	..	..	98-5	101-0	..	..	..	..	98-4	100-2	..	..	..	..

TABLE IV--contd.

No. of buffalo virus producer	6TH DAY						7TH DAY					
	M. T.	E. T.	V.	H.	† Bl.	B. O.	M. T.	E. T.	V.	D.	† Bl.	B. O.
308 . . .	103-0	103-6	..	..	..	..	103-4	104-0	..	..	..	..
76 . . .	103-6	103-0	..	..	..	..	101-9	102-2	..	..	..	..
65 . . .	102-0	103-4	x	..	..	..	100-1	102-4	..	..	..	..
51 . . .	102-2	103-4	..	..	..	..	102-2	100-0	..	..	..	..
74 . . .	104-8	98-6	..	..	..	..	102-0	107-4	..	..	..	..
55 . . .	105-0	103-2	x	..	..	..	105-0	101-6	..	..	..	..
61 . . .	103-0	104-0	..	..	..	..	99-2	103-4	..	..	..	..
62 . . .	99-0	102-0	..	..	..	..	100-0	102-2	..	..	..	..
56 . . .	101-4	104-0	x	..	..	..	100-4	103-4	..	..	..	..
59 . . .	102-0	104-2	x	..	..	..	101-2	104-0	..	x	..	..
131 . . .	101-0	103-4	..	x	..	..	100-2	102-0	..	..	..	..
71 . . .	101-6	104-0	..	x	..	..	101-4	103-0	..	..	..	..
55 . . .	101-8	104-0	x	..	..	..	100-0	100-6	..	..	..	..
54 . . .	102-2	102-8	..	..	..	..	100-0	103-0	..	..	..	..
52 . . .	103-0	104-0	..	..	..	..	101-6	103-2	x	..	..	..
57 . . .	99-8	104-0	..	..	..	..	100-2	104-0	..	..	..	..
106 . . .	101-8	104-0	..	..	..	..	102-0	103-8	..	x	..	..
139 . . .	102-6	103-6	..	..	..	..	102-6	105-6	..	x	..	..
92 . . .	101-4	104-0	..	..	..	..	101-2	104-0	..	..	..	..
75 . . .	103-6	105-8	x	..	..	..	100-0	102-2	..	x	..	..
73 . . .	101-2	104-2	..	x	..	..	100-4	104-2	..	..	..	..
90 . . .	99-8	105-0	..	..	..	..	101-8	102-0	..	..	..	..
67 . . .	100-4	103-6	..	..	..	..	99-2	101-0	x	..	..	..
60 . . .	101-2	101-4	..	..	..	..	100-0	101-0	..	..	..	..
140 . . .	98-2	102-6	x	..	x	..	98-4	..	..	..	..	x
53 . . .	101-0	..	..	..	..	x	..	..	..	..	..	..
89 . . .	101-2	104-0	..	..	..	..	99-6	103-2	..	..	..	..
58 . . .	98-0	102-0	..	..	..	..	98-2	102-8	..	..	..	..
147 . . .	99-4	102-4	x	..	x	..	95-2	..	..	x	..	x
79 . . .	101-2	104-2	..	..	..	..	98-2	103-6	..	..	..	..
127 . . .	100-2	103-2	..	..	..	..	98-4	103-0	..	..	..	..
93 . . .	98-2	101-2	..	..	..	..	98-4	102-8	..	..	..	..
104 . . .	98-6	102-2	..	..	..	..	97-4	103-2	..	..	..	..

TABLE IV—*contd.*

8TH DAY						9TH DAY						10TH DAY					
M. T.	E. T.	V.	D.	$\frac{1}{2}$ Bl.	B. O.	M. T.	E. T.	V.	D.	$\frac{1}{2}$ Bl.	B. O.	M. T.	E. T.	V.	D.	$\frac{1}{2}$ Bl.	B. O.
101-0	103-6	..	..	..	..	101-0	103-2	..	×	..	..	98-2	103-4	..	..	..	..
101-6	102-6	..	..	..	..	100-0	103-0	..	×	..	..	101-0	102-6	..	..	..	..
99-2	103-8	..	×	..	..	99-4	100-2	..	..	..	..	100-0	103-0	..	..	..	..
105-0	101-8	..	..	..	..	103-0	101-2	..	×	..	..	102-2	98-2	..	..	..	..
102-8	101-6	..	×	..	..	102-0	98-2	..	..	..	..	101-4	98-2	..	..	..	..
104-6	101-0	..	..	..	..	103-6	101-8	..	×	..	..	104-0	102-0	..	..	..	..
101-4	104-0	..	..	..	..	101-0	103-0	..	..	..	..	100-6	101-6	..	..	..	..
98-8	101-6	..	..	..	..	100-2	102-0	..	..	..	..	99-6	103-0	..	×	..	..
98-0	101-2	..	×	..	..	98-2	101-8	..	..	..	..	100-1	101-4	..	..	..	..
101-2	103-8	..	..	..	..	98-6	102-2	..	..	..	..	98-2	100-6	..	..	..	..
98-2	101-0	..	..	..	..	95-2	104-0	..	..	..	..	98-4	103-4	..	..	..	..
98-4	103-8	..	..	..	..	98-2	104-0	..	..	..	..	98-2	103-8	..	..	..	..
95-2	103-8	..	×	..	..	100-4	102-2	..	..	..	..	99-0	100-0	..	..	..	..
100-0	106-0	..	..	..	..	102-4	104-0	..	..	..	..	101-0	102-0	..	..	..	..
100-2	102-6	..	..	..	..	101-6	102-6	..	..	..	..	98-2	102-4	..	..	..	..
99-4	103-0	..	..	..	..	101-0	105-0	..	..	..	..	100-4	103-0	..	..	..	..
100-4	101-8	..	..	..	..	100-0	100-2	..	..	..	..	98-2	98-0	..	..	..	..
103-4	103-2	×	..	..	..	99-8	103-2	..	..	..	..	98-4	102-4	..	..	..	..
101-2	102-6	..	..	..	..	98-2	102-6	..	..	..	..	98-4	101-2	..	..	..	..
99-8	102-0	..	..	..	..	98-0	99-2	..	..	..	..	..	..	..	..	..	..
101-4	103-8	..	..	..	..	100-2	102-4	..	..	..	..	101-2	101-4	..	..	..	..
99-2	101-8	..	..	..	..	98-4	102-6	..	..	..	..	98-6	101-2	..	..	..	..
102-0	101-2	..	..	..	..	102-2	101-6	..	..	..	..	98-2	99-6	..	×	..	..
100-2	103-2	..	..	..	..	98-6	101-6	..	..	..	..	99-6	101-2	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
98-6	104-0	..	×	..	..	100-0	..	×	..	..	×	..	..	..	..	..	..
98-2	103-6	..	..	..	..	99-2	102-4	..	..	..	..	98-4	101-2	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
101-0	103-0	..	..	..	..	98-2	102-6	..	..	..	..	98-6	102-2	..	..	..	..
99-2	101-6	..	..	..	..	98-6	100-2	..	×	..	..	98-4	100-4	..	..	..	..
98-2	102-6	..	..	..	..	98-4	100-2	..	×	..	..	98-2	98-0	..	..	..	..
99-4	101-0	..	..	..	..	100-0	101-6	..	..	..	..	99-6	101-6	..	..	..	..

TABLE IV—*contd.*

No. of buffalo virus producer	11TH DAY						12TH DAY					
	M. T.	E. T.	V.	D.	$\frac{1}{2}$ Bl.	R. O.	M. T.	E. T.	V.	D.	$\frac{1}{2}$ Bl.	B. O.
208 . . .	103-2	102-2	..	..	..	..	102-2	..	×	..	..	×
76 . . .	99-7	100-7	..	..	..	..	101-0	..	×	..	..	×
65 . . .	99-2	98-2	..	..	..	..	98-2	..	..	..	..	..
51 . . .	99-5	..	..	..	..	..	..	..	..	..	..	..
74 . . .	101-4	102-0	..	..	..	..	98-6	101-8	..	..	..	..
66 . . .	102-0	98-2	..	..	..	..	..	..	..	..	..	..
61 . . .	101-2	101-4	..	×	..	..	99-2	101-7	..	..	..	..
62 . . .	98-6	101-4	..	..	..	..	100-6	101-4	..	..	..	..
58 . . .	98-4	102-8	..	..	..	..	98-0	102-6	..	..	..	..
59 . . .	99-0	100-0	..	..	..	..	..	..	..	..	..	..
131 . . .	98-0	98-0	..	..	..	..	98-0	98-0	..	..	..	..
71 . . .	98-0	101-4	..	..	..	..	..	..	..	..	..	..
55 . . .	98-0	99-8	..	..	..	..	98-2	100-0	..	..	..	..
54 . . .	98-2	99-6	..	..	..	..	97-5	102-8	..	..	..	..
52 . . .	99-6	103-0	..	..	..	..	98-4	102-0	..	×	..	..
57 . . .	99-6	103-8	..	..	..	..	98-6	101-2	..	×	..	..
106 . . .	..	..	..	..	..	..	..	..	..	..	..	..
139 . . .	98-2	99-6	..	..	..	..	98-2	100-2	..	..	..	..
92 . . .	98-2	101-4	..	..	..	..	98-4	101-4	..	..	..	..
75 . . .	..	..	..	..	..	..	..	..	..	..	..	..
78 . . .	101-0	99-8	..	..	..	..	99-2	101-2	..	..	..	..
90 . . .	98-4	100-6	..	..	..	..	98-2	102-2	..	..	..	..
67 . . .	98-0	101-6	..	..	..	..	98-4	101-2	..	..	..	..
60 . . .	98-4	101-4	..	..	..	..	98-2	101-2	..	×	..	..
140 . . .	..	..	..	..	..	..	..	..	..	..	..	..
53 . . .	..	..	..	..	..	..	..	..	..	..	..	..
59 . . .	..	..	..	..	..	..	..	..	..	..	..	..
58 . . .	98-0	102-4	..	..	..	..	99-2	101-6	..	..	..	..
147 . . .	..	..	..	..	..	..	..	..	..	..	..	..
79 . . .	99-2	101-2	..	..	..	..	98-2	102-6	..	..	..	..
137 . . .	98-0	98-0	..	..	..	..	..	..	..	..	..	..
63 . . .	..	..	..	..	..	..	..	..	..	..	..	..
104 . . .	98-6	101-2	..	..	..	..	99-6	103-0	..	..	..	..

TABLE IV—*contd.*

13TH DAY						14TH DAY						15TH DAY					
M. T.	E. T.	V.	D.	Bl.	B. O.	M. T.	E. T.	V.	D.	Bl.	B. O.	M. T.	E. T.	V.	D.	Bl.	B. O.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
102.0	100.6	..	..	..	..	101.8	99.6	..	..	..	..	102.0	101.0	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
100.0	102.4	..	..	..	..	99.6	102.6	..	..	..	..	101.4	101.4	..	..	..	..
100.2	102.0	..	..	..	..	101.2	101.4	..	..	..	..	99.2	101.0	..	..	..	..
98.0	100.0	..	..	..	..	98.2	98.0	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
98.0	99.2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
99.2	101.2	..	..	..	..	99.8	101.2	..	×	..	..	99.4	100.2	..	..	..	..
98.2	100.2	..	..	..	..	99.0	100.0	..	..	..	..	98.2	101.0	..	..	..	..
98.2	102.4	..	..	..	..	99.2	100.2	..	..	..	..	98.6	101.2	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
98.4	101.6	..	..	..	..	98.7	101.0	..	..	..	..	99.2	101.8	..	..	..	..
98.2	101.2	..	..	..	..	98.4	101.4	..	..	..	..	98.4	102.2	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
98.2	101.4	..	..	..	..	99.4	102.0	..	..	..	..	98.0	101.2	..	..	..	..
98.6	102.2	..	..	..	..	98.4	102.6	..	×	..	..	98.0	101.4	..	..	..	..
98.2	101.2	..	..	..	..	98.4	100.2	..	..	..	..	98.0	101.2	..	..	..	..
98.2	99.0	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
98.4	101.6	..	..	..	..	98.2	101.2	..	..	..	..	99.2	101.6	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
98.2	101.0	..	..	..	..	98.6	101.4	..	×	..	..	98.2	101.2	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
99.4	101.5	..	..	..	..	98.5	101.6	..	..	..	..	98.8	101.4	..	..	..	..

TABLE IV—*contd.*

No. of buffalo virus producer	1ST DAY						2ND DAY					
	M. T.	E. T.	V.	D.	† Bl.	B. O.	M. T.	E. T.	V.	D.	† Bl.	B. O.
103 . . .	98-6	101-2	..	..	..	..	98-4	102-2	..	..	..	..
64 . . .	98-2	100-6	..	..	..	..	99-2	101-4	..	..	..	..
59 . . .	98-4	101-6	..	..	..	..	98-4	102-0	..	..	..	..
70 . . .	99-2	101-2	..	..	..	..	98-2	101-4	..	..	..	..
50 . . .	98-4	101-0	..	..	..	..	98-4	101-0	..	..	..	..
128 . . .	99-2	101-2	..	..	..	..	101-2	100-0	..	..	..	..
304 . . .	99-0	100-6	..	..	..	..	98-6	101-4	..	..	..	..
307 . . .	98-0	100-0	..	..	..	..	98-4	101-2	..	..	..	..
306 . . .	99-2	101-6	..	..	..	..	98-4	101-2	..	..	..	..
305 . . .	98-4	101-6	..	..	..	..	98-2	101-6	..	..	..	..
310 . . .	98-2	100-2	..	..	..	..	99-4	101-8	..	..	..	..
309 . . .	98-2	100-6	..	..	..	..	99-2	101-2	..	..	..	..
320 . . .	99-2	100-8	..	..	..	..	98-9	102-2	..	..	..	..
315 . . .	99-4	101-2	..	..	..	..	98-2	102-6	..	..	..	..
322 . . .	98-2	101-6	..	..	..	..	98-4	102-4	..	..	..	..
321 . . .	98-2	101-7	..	..	..	..	98-6	101-4	..	..	..	..
323 . . .	99-6	101-2	..	..	..	..	99-2	101-8	..	..	..	..
351 . . .	100-0	101-4	..	..	..	..	100-0	101-6	..	..	..	..
354 . . .	99-2	101-8	..	..	..	..	98-2	101-5	..	..	..	..
355 . . .	98-0	102-2	..	..	..	..	98-4	101-6	..	..	..	..
357 . . .	99-2	102-0	..	..	..	..	98-4	101-8	..	..	..	..
353 . . .	99-2	101-4	..	..	..	..	98-2	102-0	..	..	..	..
374 . . .	99-2	101-6	..	..	..	..	98-2	101-6	..	..	..	..
375 . . .	98-6	101-2	..	..	..	..	99-4	101-2	..	..	..	..
378 . . .	98-2	101-7	..	..	..	..	99-2	101-7	..	..	..	..
377 . . .	99-4	101-2	..	..	..	..	98-4	101-6	..	..	..	..
376 . . .	99-2	102-2	..	..	..	..	98-8	102-8	..	..	..	..
379 . . .	98-2	101-8	..	..	..	..	98-2	102-2	..	..	..	..
393 . . .	98-6	101-6	..	..	..	..	98-6	101-8	..	..	..	..
394 . . .	98-2	101-2	..	..	..	..	98-2	102-2	..	..	..	..
392 . . .	98-2	101-6	..	..	..	..	99-2	101-2	..	..	..	..
395 . . .	100-0	101-2	..	..	..	..	99-2	102-2	..	..	..	..
397 . . .	99-2	101-0	..	..	..	..	98-7	102-4	..	..	..	..

TABLE IV—*contd.*

3RD DAY						4TH DAY						5TH DAY					
M. T.	E. T.	V.	D.	Bl.	B. O.	M. T.	E. T.	V.	D.	Bl.	B. O.	M. T.	E. T.	V.	D.	Bl.	B. O.
98-5	103-0	..	..	..	..	98-2	104-2	..	..	..	..	99-4	103-6	..	..	..	..
98-2	103-4	..	..	..	..	101-0	105-0	..	..	..	..	103-0	103-2	..	..	..	..
98-4	103-0	..	..	..	..	98-4	103-6	..	..	..	..	103-0	103-6	..	..	..	..
99-2	102-0	..	..	..	..	100-2	103-2	..	..	..	..	102-2	103-2	..	..	..	..
98-2	101-7	..	..	..	..	98-2	103-2	..	..	..	..	99-6	103-0	..	..	..	..
98-4	101-2	..	..	..	..	98-2	103-6	..	..	..	..	98-8	102-6	..	..	..	..
99-2	102-2	..	..	..	..	101-0	103-6	..	..	..	..	100-0	102-8	..	..	..	..
99-6	102-6	..	..	..	..	100-6	104-0	..	..	..	..	101-2	102-6	..	..	..	..
100-2	102-0	..	..	..	..	100-0	102-4	..	..	..	..	98-4	101-4	..	..	..	..
100-0	101-6	..	..	..	..	98-2	101-6	..	..	..	..	102-2	105-2	..	..	..	..
99-2	101-2	..	..	..	..	99-1	101-4	..	..	..	..	100-0	102-6	..	..	..	..
98-4	101-4	..	..	..	..	104-0	106-0	..	..	..	..	102-4	103-0	..	..	..	..
98-2	103-5	..	..	..	..	98-6	102-4	..	..	..	..	100-0	103-0	..	..	..	..
98-6	105-0	..	..	..	..	98-2	103-2	..	..	..	..	101-6	105-8	..	..	..	..
98-2	101-2	..	..	..	..	98-2	102-2	..	..	..	..	100-4	103-4	..	..	..	..
100-0	101-2	..	..	..	..	101-4	104-6	..	..	..	..	101-8	104-6	..	..	..	..
98-2	100-6	..	..	..	..	98-2	103-7	..	..	..	..	102-0	105-0	..	..	..	..
98-2	102-2	..	..	..	..	102-6	106-0	..	..	..	..	103-2	103-6	..	..	..	..
98-2	102-6	..	..	..	..	102-6	104-0	..	..	..	..	102-6	104-2	..	..	..	..
98-4	102-4	..	..	..	..	98-2	104-2	..	..	..	..	101-6	103-2	..	..	..	..
103-6	102-0	..	..	..	..	101-4	103-6	..	..	..	..	103-0	104-4	..	..	..	..
99-2	102-2	..	..	..	..	99-2	103-2	..	..	..	..	102-6	101-2	..	..	..	..
98-2	102-2	..	..	..	..	98-2	103-6	..	..	..	..	100-0	103-2	..	..	..	..
98-4	102-2	..	..	..	..	98-4	104-2	..	..	..	..	102-2	103-4	..	..	..	..
99-2	102-2	..	..	..	..	101-2	106-0	..	..	..	..	103-4	104-2	..	..	..	..
98-0	102-4	..	..	..	..	98-2	104-0	..	..	..	..	102-6	103-4	..	..	..	..
98-6	103-2	..	..	..	..	100-0	104-5	..	..	..	..	103-4	103-8	..	..	..	..
98-8	102-8	..	..	..	..	99-6	104-2	..	..	..	..	102-2	103-4	..	..	..	..
103-0	102-4	..	..	..	..	100-6	104-2	..	..	..	..	104-0	103-4	..	..	..	..
99-6	103-2	..	..	..	..	101-2	104-0	..	..	..	..	103-0	103-2	..	..	..	..
98-0	102-2	..	..	..	..	99-0	103-0	..	..	..	..	101-2	104-2	..	..	..	..
99-2	102-6	..	..	..	..	101-0	102-0	..	..	..	..	100-2	103-2	..	..	..	..
98-8	101-6	..	..	..	..	100-0	103-8	..	..	..	..	104-2	104-2	..	..	x	..

TABLE IV—*contd.*

No. of buffalo virus producer	6TH DAY						7TH DAY					
	M. T.	E. T.	V.	D.	$\frac{1}{2}$ Bl.	B. O.	M. T.	E. T.	V.	D.	$\frac{1}{2}$ Bl.	B. O.
108	98-2	102-6	..	..	..	..	98-8	102-2	..	..	..	..
64	102-2	102-2	..	..	..	..	98-6	107-2	..	..	..	..
69	101-0	102-8	..	..	..	..	98-4	102-8	..	..	..	..
70	98-8	102-6	..	..	..	..	98-4	101-6	..	..	..	..
50	100-0	101-8	..	..	..	..	100-2	103-2	..	..	..	..
138	101-2	102-4	..	..	..	..	100-2	102-0	..	×	..	..
304	99-2	102-6	..	..	..	..	99-2	103-2	..	..	..	..
307	98-2	102-2	..	..	..	..	98-6	103-0	..	..	..	..
503	98-6	102-6	..	..	..	..	100-0	103-2	..	..	..	..
305	100-4	102-6	..	..	..	..	101-6	102-8	..	..	..	..
310	99-2	102-8	..	..	..	..	101-0	103-2	..	..	..	..
309	100-0	103-5	..	..	..	..	100-0	104-2	..	..	..	..
310	100-0	102-6	..	..	..	..	100-0	103-2	..	..	..	..
313	99-6	103-0	..	..	..	..	99-2	102-8	..	..	..	..
322	100-0	104-6	..	..	..	..	99-8	102-6	..	..	..	..
321	104-0	105-0	..	..	..	..	104-0	105-0	..	..	..	..
323	102-8	102-4	..	..	..	..	102-4	104-0	..	..	..	..
351	100-0	103-2	..	..	..	..	101-0	101-6	..	..	..	..
354	99-6	102-6	×	..	..	..	99-4	102-6	..	×	..	..
355	99-2	100-8	..	..	..	..	99-0	102-1	..	..	..	..
357	101-2	101-4	×	..	..	..	101-2	103-2	..	×	..	..
353	102-0	102-4	..	..	..	..	102-4	103-4	..	..	..	..
374	100-0	103-2	..	..	..	..	99-4	100-2	..	..	..	..
375	102-0	102-8	..	..	..	..	100-2	102-0	..	..	..	..
378	99-8	101-4	..	..	..	..	101-2	104-8	..	..	..	..
377	102-2	101-6	..	..	..	..	100-0	102-6	..	..	..	..
376	101-4	102-2	..	..	..	..	100-0	104-0	..	..	..	..
379	101-2	102-4	..	..	..	..	101-0	103-6	..	..	..	..
393	103-2	104-6	..	..	..	..	100-0	..	..	×	..	..
394	102-2	104-0	..	..	..	..	100-2	102-6	..	×	..	..
392	99-8	103-2	..	..	..	..	100-2	101-0	..	..	..	..
395	102-0	104-4	..	..	..	..	100-2	103-2	×	..	..	..
397	100-0	102-0	..	..	..	..	98-2	103-0	..	×	..	..

TABLE IV—*contd.*

8TH DAY						9TH DAY						10TH DAY					
M. T.	E. T.	V.	D.	$\frac{1}{2}$ Bl.	B. O.	M. T.	E. T.	V.	D.	$\frac{1}{2}$ Bl.	B. O.	M. T.	E. T.	V.	D.	$\frac{1}{2}$ Bl.	B. O.
99-2	102-6	..	..	..	..	100-4	101-2	..	..	..	..	98-0	..	..	×	..	..
99-4	102-4	..	..	..	..	98-2	102-2	..	..	..	..	102-0	101-4	..	..	..	..
98-0	103-2	..	..	..	..	99-6	101-6	..	..	..	..	99-2	..	×	..	..	×
100-4	102-6	..	..	..	..	101-0	102-2	..	..	..	..	99-4	102-2	..	..	..	..
99-2	100-2	..	..	..	..	98-4	102-6	..	..	..	..	98-2	102-6	..	..	..	..
101-6	103-0	..	..	..	..	100-0	102-4	..	..	..	..	103-0	102-6	..	..	..	..
100-0	102-2	×	..	×	..	100-0	..	..	..	..	×	..	..	..	..	..	..
100-2	101-6	..	..	..	..	98-4	103-2	..	..	..	..	99-2	100-0	..	×	..	..
98-2	102-8	..	..	..	..	98-2	102-6	..	..	..	..	100-0	101-8	..	..	..	..
102-6	105-0	..	..	..	..	101-0	102-8	..	..	..	..	98-8	102-2	..	..	..	..
99-2	100-0	..	..	..	..	98-0	101-8	..	..	..	..	99-6	102-7	..	..	..	..
102-0	103-8	..	..	..	..	100-0	103-4	..	×	..	..	99-8	103-0	..	..	..	..
99-2	101-8	..	..	..	..	100-0	101-0	..	..	..	..	99-0	100-2	..	..	..	..
100-4	102-2	..	..	..	..	98-6	100-0	..	..	..	..	99-4	102-0	..	..	..	..
101-4	103-4	..	..	..	..	100-2	101-6	..	×	..	..	98-0	101-4	..	×	..	..
102-0	98-2	..	×	..	..	..	..	..	..	..	..	..	..	..	..	..	..
101-0	103-8	..	..	..	..	102-8	103-2	..	..	..	..	98-4	102-4	..	..	..	..
99-2	102-2	..	..	..	..	102-2	102-4	..	..	..	..	99-6	101-2	..	..	..	..
100-0	101-6	..	..	..	..	98-2	99-2	..	..	..	..	..	..	..	..	..	..
100-2	102-5	..	..	..	..	100-0	101-7	..	..	..	..	99-4	100-4	..	..	..	..
100-0	..	..	..	..	×	..	..	..	..	..	..	..	..	..	..	..	..
99-2	99-8	..	..	..	..	100-2	100-2	..	..	..	..	99-4	100-0	..	..	..	..
98-6	100-4	..	..	..	..	100-0	101-0	..	..	..	..	100-0	102-6	..	..	..	..
99-0	101-6	..	..	..	..	101-4	102-2	..	..	..	..	100-2	102-8	..	..	..	..
104-0	104-4	×	..	..	..	101-0	..	..	×	..	×	..	..	..	..	..	..
99-6	103-2	..	×	..	..	99-6	..	..	..	..	..	..	..	..	..	..	..
101-2	103-0	..	..	..	..	104-0	102-4	..	..	..	..	100-6	100-4	..	..	..	..
101-4	102-2	..	..	..	..	101-2	102-2	..	..	..	..	101-2	100-4	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
101-2	103-4	..	..	..	..	103-4	102-6	×	..	..	..	101-0	103-0	..	..	..	..
99-2	100-8	..	..	..	..	99-2	102-0	..	..	..	..	99-2	102-4	..	..	..	..
99-2	..	..	×	..	×	..	..	..	..	..	..	..	..	..	..	..	..
100-0	103-2	..	..	..	..	98-2	101-0	..	..	..	..	97-2	101-2	..	..	..	..

TABLE IV—*contd.*

No. of buffalo virus producer	11TH DAY						12TH DAY					
	M. T.	E. T.	V.	D.	$\frac{1}{2}$ Bl.	B. O.	M. T.	E. T.	V.	D.	$\frac{1}{2}$ Bl.	B. O.
103	..	..	..	..	..	..	..	..	..	..	..	..
64	98-6	101-2	..	..	..	..	98-4	102-6	..	..	..	..
69	..	..	..	..	..	..	..	..	..	..	..	..
70	100-0	101-4	..	..	..	..	98-2	101-0	..	..	..	..
50	98-4	98-2	..	×	..	..	..	..	..	..	..	..
133	98-6	100-0	..	..	..	..	98-0	98-0	..	..	..	..
304	..	..	..	..	..	..	..	..	..	..	..	..
307	99-2	101-0	..	..	..	..	98-4	102-6	..	..	..	..
306	98-6	101-8	..	..	..	..	100-0	102-4	..	..	..	..
305	98-6	103-2	..	..	..	..	100-2	101-2	..	..	..	..
310	100-2	103-6	..	..	..	..	100-4	100-6	..	..	..	..
309	100-4	102-6	..	..	..	..	101-8	103-2	..	..	..	..
320	99-8	100-2	..	..	..	..	98-2	100-2	..	..	..	..
318	98-2	101-0	..	..	..	..	100-0	101-8	..	..	..	..
322	98-2	102-0	..	..	..	..	99-4	100-8	..	..	..	..
321	..	..	..	..	..	..	..	..	..	..	..	..
323	99-2	103-0	..	..	..	..	98-8	101-5	..	..	..	..
351	99-8	101-4	..	..	..	..	100-0	102-0	..	..	..	..
354	..	..	..	..	..	..	..	..	..	..	..	..
355	98-4	100-0	..	..	..	..	100-2	102-0	..	..	..	..
357	..	..	..	..	..	..	..	..	..	..	..	..
353	99-6	100-4	..	..	..	..	100-4	100-6	..	×	..	..
374	101-2	101-4	..	..	..	..	101-2	100-6	..	..	..	..
375	102-0	102-2	..	..	..	..	99-4	102-0	..	..	..	..
378	..	..	..	..	..	..	..	..	..	..	..	..
377	..	..	..	..	..	..	..	..	..	..	..	..
376	99-4	101-2	..	..	..	..	98-4	101-6	..	..	..	..
379	100-0	101-4	..	..	..	..	99-0	101-2	..	..	..	..
382	..	..	..	..	..	..	..	..	..	..	..	..
384	101-0	102-2	..	..	..	..	98-6	99-6	..	..	..	..
382	101-6	102-0	..	..	..	..	99-6	101-0	..	..	..	..
385	..	..	..	..	..	..	..	..	..	..	..	..
397	100-0	102-2	..	..	..	..	97-2	99-2	..	..	..	..

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13TH DAY						14TH DAY						15TH DAY					
M. T.	E. T.	V.	D.	Bl.	B. O.	M. T.	E. T.	V.	D.	Bl.	B. O.	M. T.	E. T.	V.	D.	Bl.	B. O.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
95-0	101-4	..	..	..	..	95-2	100-6	..	..	..	..	100-0	101-4	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
95-4	95-6	..	..	..	..	95-4	101-6	..	..	..	..	95-2	100-8	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
95-2	100-4	..	..	..	..	95-4	104-8	..	..	..	..	95-6	100-4	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
95-6	103-0	..	..	..	..	95-8	102-6	..	..	..	..	95-4	101-8	..	..	..	..
100-0	102-4	..	..	..	..	95-2	102-0	..	..	..	..	95-4	101-2	..	..	..	..
95-4	102-0	..	..	..	..	95-4	100-0	..	..	..	..	95-6	102-2	..	..	..	..
95-2	101-8	..	..	..	..	99-2	101-2	..	..	..	..	99-0	100-7	..	..	..	..
95-0	95-2	..	..	..	..	95-0	100-0	..	..	..	..	98-2	..	..	..	..	..
99-0	101-0	..	X	..	..	95-2	101-4	..	..	..	..	99-0	101-6	..	..	..	..
100-0	102-4	..	..	..	..	95-0	101-4	..	..	..	..	99-6	101-2	..	..	..	..
99-2	100-6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
100-0	101-7	..	X	..	..	95-4	101-8	..	..	..	..	95-6	102-6	..	..	..	..
95-4	101-8	..	..	..	..	100-4	100-4	..	..	..	..	99-4	101-6	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
95-6	101-2	..	..	..	..	97-4	101-8	..	..	..	..	95-6	100-0	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
105-0	102-2	..	..	..	..	95-2	100-0	..	..	..	..	98-2	101-4	..	..	..	..
95-0	101-0	..	..	..	..	95-4	102-2	..	..	..	..	98-6	102-2	..	..	..	..
95-2	100-0	..	..	..	..	95-2	101-4	..	..	..	..	99-4	102-6	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
95-4	103-0	..	..	..	..	101-0	101-8	..	..	..	..	97-4	101-4	..	..	..	..
100-0	103-0	..	..	..	..	95-2	100-0	..	..	..	..	98-2	101-2	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
97-4	101-2	..	..	..	..	95-4	102-4	..	..	..	..	95-2	103-6	..	..	..	..
99-2	102-6	..	..	..	..	95-2	103-4	..	..	..	..	98-2	101				

TABLE IV—*contd.*

No. of buffalo virus producer	1ST DAY						2ND DAY					
	M. T.	E. T.	V.	D.	† Bl.	B. O.	M. T.	E. T.	V.	D.	† Bl.	B. O.
77 . . .	98.6	101.6	..	..	..	..	100.2	101.2	..	..	..	..
319 . . .	101.2	101.4	..	..	..	..	98.0	101.6	..	..	..	..
320 . . .	98.4	100.6	..	..	..	..	98.6	101.6	..	..	..	..
321 . . .	97.2	101.4	..	..	..	..	98.4	101.8	..	..	..	..
324 . . .	99.4	101.0	..	..	..	..	98.6	101.6	..	..	..	..
325 . . .	98.2	100.0	..	..	..	..	98.2	100.6	..	..	..	..
326 . . .	99.2	101.0	..	..	..	..	100.0	102.2	..	..	..	..
327 . . .	98.6	101.2	..	..	..	..	98.2	101.6	..	..	..	..
328 . . .	99.2	101.4	..	..	..	..	99.4	102.0	..	..	..	..
329 . . .	98.2	101.7	..	..	..	..	98.2	102.6	..	..	..	..
330 . . .	98.4	101.2	..	..	..	..	98.2	102.4	..	..	..	..
331 . . .	99.2	101.0	..	..	..	..	98.2	102.4	..	..	..	..
332 . . .	98.2	102.4	..	..	..	..	100.0	102.3	..	..	..	..
335 . . .	98.7	100.0	..	..	..	..	98.2	102.0	..	..	..	..
333 . . .	98.2	101.0	..	..	..	..	98.4	100.0	..	..	..	..
334 . . .	98.4	101.4	..	..	..	..	98.6	101.2	..	..	..	..
336 . . .	98.4	100.2	..	..	..	..	99.2	100.7	..	..	..	..
337 . . .	99.6	101.4	..	..	..	..	98.6	101.4	..	..	..	..
338 . . .	98.6	100.0	..	..	..	..	98.2	102.2	..	..	..	..
339 . . .	99.6	101.2	..	..	..	..	99.4	101.6	..	..	..	..
341 . . .	98.6	102.3	..	..	..	..	98.4	101.0	..	..	..	..
345 . . .	99.5	102.0	..	..	..	..	99.2	101.2	..	..	..	..
349 . . .	98.4	101.0	..	..	..	..	99.7	101.2	..	..	..	..
344 . . .	98.2	101.6	..	..	..	..	99.5	102.2	..	..	..	..
347 . . .	98.4	100.4	..	..	..	..	99.1	102.2	..	..	..	..
342 . . .	98.2	100.4	..	..	..	..	98.2	100.0	..	..	..	..
348 . . .	99.2	101.8	..	..	..	..	98.4	101.6	..	..	..	..
346 . . .	99.4	101.2	..	..	..	..	99.4	101.0	..	..	..	..
340 . . .	99.4	101.0	..	..	..	..	98.0	101.0	..	..	..	..
343 . . .	98.6	101.6	..	..	..	..	98.2	100.7	..	..	..	..
350 . . .	98.4	100.6	..	..	..	..	98.0	101.2	..	..	..	..
352 . . .	99.2	101.2	..	..	..	..	98.2	102.2	..	..	..	..
356 . . .	99.2	101.2	..	..	..	..	100.0	101.4	..	..	..	..
358 . . .	98.4	100.6	..	..	..	..	99.2	101.7	..	..	..	..

TABLE IV—*contd.*

3RD DAY.						4TH DAY						5TH DAY					
M. T.	E. T.	V.	D.	$\frac{1}{2}$ Bl.	B. O.	M. T.	E. T.	V.	D.	$\frac{1}{2}$ Bl.	B. O.	M. T.	E. T.	V.	D.	$\frac{1}{2}$ Bl.	B. O.
98-8	104-4	..	..	..	..	101-2	104-0	..	..	..	..	100-0	103-2	..	..	..	..
100-0	103-7	..	..	..	..	98-4	104-0	..	..	..	..	100-4	104-0	..	..	..	..
99-2	103-2	..	..	..	..	100-0	103-6	..	..	..	..	103-2	103-2	..	..	..	..
97-0	102-0	..	..	..	..	99-2	100-6	..	..	..	..	102-8	105-0	..	..	..	..
98-2	101-5	..	..	..	..	100-0	105-0	..	..	..	..	103-0	103-0	..	..	..	..
98-2	102-2	..	..	..	..	99-8	104-6	..	..	..	..	101-4	103-2	..	..	..	..
99-2	103-6	..	..	..	..	99-6	104-4	..	..	..	..	103-8	104-0	..	..	..	..
98-6	103-0	..	..	..	..	98-4	103-0	..	..	..	..	100-0	103-6	..	..	..	..
99-6	102-5	..	..	..	..	99-2	103-8	..	..	..	..	101-0	101-8	..	..	..	..
98-4	102-6	..	..	..	..	98-4	104-0	..	..	..	..	102-0	102-6	..	..	..	..
99-2	103-0	..	..	..	..	101-0	103-2	..	..	..	..	103-2	105-0	..	..	..	..
98-4	103-0	..	..	..	..	99-2	103-0	..	..	..	..	103-0	105-0	..	..	..	..
101-0	102-4	..	..	..	..	99-4	100-2	..	..	..	..	98-2	103-0	..	..	..	..
100-0	102-6	..	..	..	..	98-6	101-2	..	..	..	..	100-0	104-6	..	..	..	..
98-7	103-2	..	..	..	..	100-0	102-4	..	..	..	..	102-6	102-8	..	..	..	..
99-4	100-0	..	..	..	..	99-2	104-0	..	..	..	..	100-0	102-6	..	..	..	..
99-2	102-4	..	..	..	..	99-8	103-8	..	..	..	..	101-0	102-4	×	..	×	..
98-4	103-0	..	..	..	..	100-4	103-2	..	..	..	..	101-2	101-7	..	..	..	..
99-2	101-8	..	..	..	..	98-2	103-6	..	..	..	..	99-6	102-6	..	..	..	..
98-6	102-0	..	..	..	..	99-4	102-4	..	..	..	..	98-8	103-1	..	..	..	..
98-2	102-2	..	..	..	..	100-0	103-6	..	..	..	..	101-0	104-0	..	..	..	..
98-2	101-8	..	..	..	..	98-7	103-8	..	..	..	..	103-0	105-2	..	..	..	..
98-4	102-4	..	..	..	..	98-6	104-2	..	..	..	..	101-6	104-2	..	..	..	..
98-2	101-2	..	..	..	..	98-7	102-6	..	..	..	..	100-0	102-6	..	..	..	..
98-4	101-4	..	..	..	..	101-4	104-2	..	..	..	..	102-8	105-2	..	..	..	..
98-6	101-2	..	..	..	..	98-2	104-0	..	..	..	..	101-2	103-2	..	..	..	..
98-4	102-6	..	..	..	..	99-2	102-0	..	..	..	..	101-0	102-6	..	..	..	..
98-2	101-4	..	..	..	..	98-0	104-0	..	..	..	..	102-4	103-6	..	..	..	..
98-2	101-6	..	..	..	..	98-6	103-2	..	..	..	..	100-0	102-2	..	..	..	..
98-0	101-2	..	..	..	..	99-4	104-6	..	..	..	..	99-2	102-6	..	..	..	..
98-7	102-0	..	..	..	..	101-2	103-6	..	..	..	..	102-4	101-2	..	..	..	..
99-4	102-6	..	..	..	..	100-0	104-2	..	..	..	..	101-6	103-2	..	..	..	..
101-0	102-4	..	..	..	..	103-0	103-8	..	..	..	..	103-8	104-2	..	..	..	..
100-0	102-2	..	..	..	..	102-0	104-2	..	..	..	..	103-4	103-0	..	..	..	..

TABLE IV—*contd.*

No. of buffalo virus producer	6TH DAY						7TH DAY					
	M. T.	E. T.	V.	D.	† Bl.	B. O.	M. T.	E. T.	V.	D.	† Bl.	B. O.
77 . . .	99-2	103-8	×	..	×	..	99-2	..	..	..	..	×
310 . . .	101-0	103-2	..	..	..	..	99-4	103-8	..	..	..	..
396 . . .	101-6	104-0	..	..	..	..	100-0	102-4	..	×	..	..
68 . . .	103-2	105-7	..	..	..	..	104-0	105-5	..	..	..	..
321 . . .	101-0	104-0	..	..	..	..	100-0	101-6	..	..	..	..
325 . . .	101-2	103-8	..	..	..	..	102-0	101-4	..	..	..	..
326 . . .	102-6	103-2	..	..	..	..	101-2	103-0	..	..	..	..
327 . . .	103-0	102-6	..	..	..	..	100-0	102-6	..	..	..	..
328 . . .	100-0	102-0	..	..	..	..	99-4	103-6	..	..	..	..
329 . . .	102-0	103-4	..	..	..	..	101-2	103-0	..	..	..	..
330 . . .	103-0	104-2	..	..	..	..	99-8	104-0	..	..	..	..
331 . . .	104-0	103-8	..	..	..	..	101-2	104-2	..	..	..	..
332 . . .	100-0	103-0	..	..	..	..	100-2	101-2	..	..	..	..
335 . . .	102-0	105-0	..	..	..	..	103-0	100-6	..	..	..	..
338 . . .	102-6	103-0	×	..	×	..	101-4	101-6	..	..	..	..
334 . . .	101-0	100-8	..	..	..	..	100-2	102-6	..	..	..	..
336 . . .	101-2	102-4	..	..	..	..	99-2	..	..	..	..	×
337 . . .	100-0	102-6	..	..	..	..	98-6	102-6	..	..	..	..
338 . . .	99-6	101-2	..	..	..	..	98-2	101-4	..	..	..	..
339 . . .	99-2	101-0	..	..	..	..	98-6	100-7	..	..	..	..
341 . . .	100-0	104-0	..	..	..	..	100-0	105-2	..	..	..	..
345 . . .	101-6	104-6	..	..	..	..	102-2	106-0	..	..	..	..
346 . . .	101-0	105-2	..	..	..	..	102-0	104-8	..	..	..	..
344 . . .	101-0	102-0	..	..	..	..	102-0	102-4	..	..	..	..
347 . . .	101-0	103-0	..	..	..	..	102-2	103-2	×	..	×	..
342 . . .	102-0	101-6	..	..	..	..	101-4	104-2	..	×	..	..
343 . . .	100-6	101-4	..	..	..	..	100-2	102-0	..	×	..	..
346 . . .	102-0	103-2	..	..	..	..	100-0	102-2	..	×	..	..
340 . . .	101-6	101-6	..	..	..	..	98-2	103-2	..	..	..	..
341 . . .	100-8	101-4	..	..	..	..	99-2	101-8	..	×	..	..
350 . . .	100-6	103-6	..	..	..	..	101-4	102-4	..	..	..	..
352 . . .	101-0	102-4	..	..	..	..	101-8	102-7	..	..	..	..
356 . . .	101-6	104-0	×	..	×	..	97-2	..	..	..	..	×
358 . . .	102-0	103-8	..	..	..	..	101-6	101-6	..	..	..	..

TABLE IV—*contd.*

8TH DAY						9TH DAY						10TH DAY					
M. T.	E. T.	V.	D.	Bl.	B. O.	M. T.	E. T.	V.	D.	Bl.	B. O.	M. T.	E. T.	V.	D.	Bl.	B. O.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
100-0	105-0	..	..	..	..	103-6	104-6	..	×	..	..	100-0	99-2	..	..	..	..
99-2	104-2	..	..	..	..	99-2	101-8	..	..	..	..	100-4	101-2	..	..	..	..
99-8	103-6	..	×	..	..	101-6	103-2	..	..	..	..	100-2	102-0	..	..	..	..
98-2	103-0	..	×	..	..	100-0	..	×	..	..	×	..	..	..	..	..	..
100-0	103-2	..	..	..	..	100-0	103-0	..	..	..	..	101-2	102-4	..	..	..	..
100-0	104-0	..	..	..	..	102-0	102-4	..	×	..	..	100-0	101-8	..	..	..	..
99-2	103-0	..	..	..	..	100-0	103-0	..	..	..	..	98-2	100-6	..	..	..	..
99-4	103-4	..	..	..	..	101-0	102-7	..	..	..	..	98-2	101-9	..	×	..	..
98-6	103-2	..	..	..	..	99-2	101-4	..	..	..	..	98-6	101-7	..	×	..	..
98-2	101-2	×	..	×	..	100-0	..	..	..	..	×	..	..	..	..	..	..
99-8	102-6	..	..	..	..	101-2	102-4	..	..	..	..	98-2	101-6	..	..	..	..
100-4	101-8	..	..	..	..	98-4	101-4	..	..	..	..	99-6	101-6	..	..	..	..
100-0	102-2	..	..	..	..	99-2	102-0	..	×	..	..	99-6	..	..	..	..	..
100-6	..	..	..	..	×	..	..	..	..	..	..	..	..	..	..	..	..
98-7	100-0	..	..	..	..	99-6	101-6	..	..	..	..	98-2	103-0	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
98-4	101-0	..	..	..	..	100-0	103-0	..	×	..	..	98-4	101-4	..	..	..	..
99-0	102-0	..	..	..	..	98-6	102-6	..	..	..	..	98-7	102-4	..	..	..	..
100-0	102-6	..	..	..	..	100-0	101-6	..	..	..	..	100-0	101-8	..	..	..	..
101-6	101-4	..	..	..	..	102-4	101-6	..	..	..	..	101-0	..	..	×	..	..
102-0	104-6	..	..	..	..	104-0	101-6	..	×	..	..	100-0	102-6	..	..	..	..
102-4	103-0	×	..	×	..	100-0	..	..	..	..	×	..	..	..	..	..	..
101-2	104-2	..	..	..	..	103-0	105-0	..	..	..	..	101-0	102-2	..	..	..	..
99-4	..	..	..	..	×	..	..	..	..	..	..	..	..	..	..	..	..
99-2	103-0	..	..	..	..	99-6	..	..	..	..	..	..	..	..	..	..	..
99-2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
99-4	104-0	..	..	..	..	101-0	102-0	..	..	..	..	..	..	..	..	..	..
99-2	101-6	..	..	..	..	99-4	103-0	×	×	..	..	98-2	101-2	..	..	..	..
100-0	102-2	..	..	..	..	99-2	102-6	..	..	..	..	99-2	101-2	..	..	..	..
101-4	102-7	×	×	..	..	98-0	103-2	..	..	..	..	..	..	..	..	..	..
101-4	101-6	..	..	..	..	100-0	102-2	..	×	..	..	99-2	102-4	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
101-0	101-4	×	..	..	..	100-0	103-0	..	×	..	..	100-6	..	..	..	..	×



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